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PUBLIC HEALTH SERVICE
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NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

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THIRTY-FIFTH MEETING

ADVISORY BOARD ON
RADIATION AND WORKER HEALTH

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DAY TWO

ABRWH BOARD MEETING

The verbatim transcript of the
Meeting of the Advisory Board on Radiation and
Worker Health held at the Doubletree Oak Ridge,
Oak Ridge, Tennessee, on January 25, 2006.

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January 25, 2006

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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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MR. MARTIN DELOZIER
MR. JAMES HACKWORTH
MR. LEONARD BOWERS

P R O C E E D I N G S

(8:45 a.m.)

WELCOME AND OPENING COMMENTS

DR. PAUL ZIEMER, CHAIR

DR. LEWIS WADE, EXECUTIVE SECRETARY

1 DR. ZIEMER: Good morning, everyone. This begins day
2 two of our meeting of the Advisory Board on
3 Radiation and Worker Health here in Oak Ridge.
4 I want to give you the usual reminders, and
5 that is to register your attendance with us
6 today at the registration books out in the
7 corridor. Also, members of the public who wish
8 to address the assembly later today at the
9 public comment period, which is at 7:30 this
10 evening, please register on the book that is
11 also in the -- in the corridor.
12 Again I'll remind you that there are copies of
13 the various documents that are being used today
14 on the table over on my far right.
15 Board members, you should have received this
16 morning copies of the minutes of the August and
17 October meetings, and we will review those
18 minutes tomorrow, but I want to make sure all
19 of you have those.
20 The first main item on our agenda this -- well,
21 let me pause here and ask Dr. Wade, our

1 Designated Federal Official, if he has any
2 additional general remarks this morning.

3 **DR. WADE:** Well, only to -- I mean I -- for
4 some reason I feel compelled to thank the Board
5 for its hard work. There is a tremendous
6 amount of material on your plate, and I know
7 that it's difficult and I applaud your efforts.
8 I also applaud your efforts at a level of
9 transparency in work that I've not seen in my
10 time associated with such boards. I think it
11 reflects well on not only the hard work you do,
12 but the way you do that work, and I think a
13 note of thanks is appropriate, so thank you for
14 that.

15 Just to usurp Paul for one minute, on the
16 Pacific Proving Grounds we have no conflicts of
17 interest on the Board, so we are free to do
18 anything we want to do in any way we want to do
19 it.

20 **PACIFIC PROVING GROUNDS SEC DR. PAUL ZIEMER, CHAIR**

21 **DR. ZIEMER:** Okay. That opens the door pretty
22 wide. Well, I -- that --

23 **DR. DEHART:** Could we visit?

24 **DR. ZIEMER:** -- that does bring us to the first
25 main item on our agenda, which is the SEC

1 petition on the Pacific Proving Grounds. We
2 will have a presentation from NIOSH by Dr.
3 Neton. That will be followed by a presentation
4 from the petitioners, and hopefully we'll have
5 on the line Danella Karo. I don't know if
6 Danella's on the phone yet --

7 **MS. KARO:** Yes, I have just (unintelligible) --

8 **DR. ZIEMER:** Danella, welcome.

9 **MS. KARO:** -- thank you.

10 **DR. ZIEMER:** Please let us know if you have
11 difficulty hearing. So we'll hear then from
12 Danella, and then -- or is -- it's Daniella, I
13 guess, is it Daniella?

14 **MS. KARO:** It's Daniella, yes.

15 **DR. ZIEMER:** I want to pronounce it correctly.

16 **MS. KARO:** That's okay. Thank you.

17 **DR. ZIEMER:** Thank you. And then also present
18 with us this morning is Paul Blake. Paul is
19 here on behalf of the Defense Threat Reduction
20 Agency, and as many of you know, DTRA is
21 involved in a counterpart program involving
22 compensation for atomic veterans. And Board
23 members, I hope you received the recent --

24 **DR. WADE:** It's in the book.

25 **DR. ZIEMER:** -- document -- is it in the book?

1 **DR. WADE:** Yeah, it should be everything.

2 **DR. ZIEMER:** -- in the tab, as well, with a
3 number of comments and concerns that were
4 raised by DTRA, and we'll have an opportunity
5 to discuss those, as well, in connection with
6 this petition.

7 So let us begin with the presentation by NIOSH.

8 **DR. WADE:** And Ms. Karo, please let us know if
9 you have any trouble hearing at all.

10 **MS. KARO:** Thank you, I can hear you quite
11 well. Thank you.

12 **PRESENTATION BY NIOSH, DR. JIM NETON, NIOSH**

13 **DR. WADE:** Okay. And now Dr. Neton will start
14 to talk. This is -- this one is proof of the
15 fact that there are no simple SECs.

16 **DR. NETON:** Thank you. Good morning,
17 everybody. I'm going to discuss the SE--
18 evaluate-- NIOSH's evaluation of SEC Petition
19 No. 20, which was -- was received by NIOSH
20 under a different -- a different criteria or
21 different definition. We now are evaluating
22 the Pacific Proving Grounds in total and not
23 just Operation HARDTACK 1, which was the basis
24 for the petition. We'll get into that a little
25 bit later.

1 I just want to start -- that's interesting.
2 The font changed on my slides overnight. It's
3 still readable, fortunately, but that's really
4 odd.

5 The first slide I just want to show you is a
6 little background information on what we mean
7 when we talk about Pacific Proving Grounds, and
8 the Pacific Proving Grounds is a series of
9 atolls and islands in the Marshall Islands --
10 including Enewetak, Bikini, Johnson Island and
11 Christmas Island -- where a series of nuclear
12 tests were conducted by the military -- U.S.
13 military, starting in 1946 and finishing in
14 1962. As the slide indicates, it started with
15 Operation CROSSROADS and, through various
16 series, completed with DOMINIC in '62. There
17 were a number of detonations at each of these
18 tests. Each of those detonations had specific
19 names. But suffice it to say that in total
20 there were a little over 100 detonations in the
21 Pacific Proving Grounds during this time period
22 -- of various natures, whether they were
23 underwater, air bursts, surface bursts, that
24 sort of thing. It was a pretty rigorous
25 testing program for nuclear weapons.

1 As I indicated, the petition as received by
2 NIOSH, initial class, was for all scientists
3 and couriers who were employed at Enewetak
4 Atoll during Operation HARDTACK 1 from July
5 1st, 1958 through August 31st, 1958 -- a very
6 narrow period of time, a very narrow window.
7 As usual with these petitions, NIOSH takes the
8 opportunity to evaluate beyond the established
9 class to see if there were -- there's any
10 additional exposure scenarios and time periods
11 that should be evaluated and could be possibly
12 covered under this petition.

13 I'm going to take a similar tack that I have --
14 NIOSH has with past SEC petition evaluations
15 and sort of go through the process and show you
16 and highlight the various things that we've
17 looked at as far as this petition -- and all of
18 these have been summarized in the evaluation
19 report that you've received.

20 So as usual, once a petition meets the criteria
21 it become qualified. This petition was
22 qualified April 11, 2005, and the regulations
23 require that we notify the petitioner and
24 publish a notice in the *Federal Register*. The
25 petitioner was notified and a notice was

1 published in the *Federal Register* on May 5th,
2 2005.

3 In keeping with our process we evaluate the
4 petition using the guidelines in 83.13, and we
5 submit a summary of the findings of the
6 evaluation report to the Board. That report
7 was sent to the Board on October 20th. It was
8 also sent to the petitioners on October 20th,
9 2005. A notice that the petition report would
10 be discussed at the Advisory Board, this
11 meeting here, was published in the *Federal*
12 *Register* on January 18th, 2006.

13 There was a supplement submitted to the Board
14 and the petitioners fairly recently, on January
15 20th, 2006, and that was a result of a couple
16 of things. It was primarily motivated based on
17 a letter that we -- that NIOSH had received
18 from Dr. Paul Blake of the Defense Threat
19 Reduction Agency on December -- it was dated
20 December 22nd, 2005. That letter expressed
21 concern that the petition report contained
22 several misrepresentations of how the -- of a
23 National Research Council report that was
24 published on the DTRA program, the Defense
25 Threat Reduction Agency's programs. And it

1 also had a discussion of misconceptions that
2 NIOSH may have had about the operating status
3 of the DTRA program. So in this supplement we
4 attempted to address the issues raised in the
5 report, and I'll discuss that in detail a
6 little bit further.

7 In addition in the supplement we took the
8 opportunity to slightly modify the class
9 definition that we were proposing, and somewhat
10 narrowed the focus of the petition -- of the
11 proposed class, and we'll talk about that
12 later, as well.

13 Moving on with the evaluation process, as in
14 past petitions there's a two-pronged test
15 established by EEOICPA to determine two things;
16 one, is it feasible to estimate the levels of
17 radiation dose with sufficient accuracy; and
18 secondly, is there a reasonable likelihood that
19 the dose may have endangered the health of the
20 workers. In reference to sufficient accuracy,
21 the regulation states that we need to have
22 access to data that can estimate the maximum
23 radiation dose for every type of cancer that
24 NIOSH would need to reconstruct at this site.
25 And in fact we would need to do this under

1 plausible exposure circumstances. So in that
2 respect it would not be sufficient -- and in
3 practice we've seen in other SEC petition
4 evaluations -- to, for instance, multiply some
5 doses by a very high multiplier to assure that
6 we bounded the doses. That would not meet our
7 criteria of sufficient accuracy under the
8 regulation.

9 To determine if we can do these doses with
10 sufficient accuracy, we went about identifying
11 and reviewing a number of data sources of
12 available information to see if we could
13 feasibly do these dose reconstructions. And so
14 in keeping with the hierarchical approach in
15 the dose reconstruction regulation, we went
16 about looking for sources of personal
17 monitoring data, area monitoring data and
18 testing processes and radiation source
19 materials. That is, do we have any bioassay
20 data out there, which would be our choice of
21 preference for doing dose reconstructions.
22 Barring that, do we have any area monitoring
23 samples, air samples, that sort of thing. And
24 lacking that, could we possibly reconstruct
25 these doses using a source term analysis.

1 The resources available were from the usual
2 cast of characters. We have a dose
3 reconstruction database where in fact we have
4 information from claimants. We looked at the
5 claims that we have in our database for
6 claimants from the Pacific Proving Grounds,
7 looked -- and searched those for any evidence
8 of internal/external monitoring data, air
9 monitoring data of that sort. We've been
10 successful in the past at finding this type of
11 information on claim files. We've also looked
12 at our research database where NIOSH, with
13 ORAU's assistance, has gone out and conducted
14 extensive data capture efforts to retrieve
15 archived records, looking for information
16 related to these source terms -- bioassay, area
17 monitoring, that sort of thing.
18 We also searched publicly available records
19 that are out there. The Defense Threat
20 Reduction Agency has a very rich web site that
21 contains a number of reports detailing the
22 specifics of many of these tests, as well as
23 some Department of Energy web sites and
24 Lawrence Livermore documents.
25 And lastly, we looked through the documentation

1 and evaluated the documentation or the
2 affidavits that were provided by the
3 petitioner.

4 We're looking through all these documents and
5 looking at them from the perspective can we do
6 a dose reconstruction and also evaluate these
7 for the -- to determine the basis for health
8 endangerment. That is, were these -- were
9 there sufficient sources of ionizing radiation
10 out there in the environment, and how were
11 these sources of exposure delivered; were they
12 episodic over a period of time, or were they
13 some discrete event where a mere presence would
14 have endangered their health.

15 As I mentioned, we did review a lot of
16 additional documents that were available on
17 public-accessible web sites, including
18 Livermore's, DTRA's and DOE's. And in fact we
19 knew that the Defense Threat Reduction Agency
20 was engaged in a similar program to do dose
21 reconstructions for military personnel who were
22 at these test sites. And so we engaged in
23 several conversations with them via telephone
24 and ultimately ended up having a site visit
25 with DTRA contractor personnel who were

1 actually doing these dose reconstructions to
2 evaluate their process to see if it may be of
3 use in reconstructing doses for purposes of
4 EEOICPA.

5 In fact, at the end of our visit we received
6 some -- an example dose reconstruction provided
7 by them for a test case. The dose
8 reconstructions under the Defense Threat
9 Reduction Agency's programs are -- at least the
10 ones that we received -- were -- used the ICRP-
11 30 models for internal dose and estimated a 50-
12 year committed dose rather than the annual
13 doses that we are -- we use under this program
14 for our IREP calculations.

15 I might add that the dose reconstructions for
16 DTRA -- that the DTRA program itself, the
17 Nuclear Test Personnel Review program, are
18 conducted for non-presumptive cancers. Under
19 the military program, all cancers are --
20 there's a list of presumptive cancers, much
21 like in our program, and they are actually
22 doing dose reconstructions for the non-
23 presumptive cancers.

24 Okay, I'm going to skip this -- that really
25 weird how that changed the font. I'm going to

1 skip this slide and go back to it because I
2 think the process will be a little better if I
3 first discuss -- continue on with the
4 evaluation process.

5 We did look at affidavits and some
6 documentation provided by the petitioners.
7 This consisted of a signed affidavit from the
8 petitioner which discussed that there were a
9 number of scientists gathered in areas where
10 boxes had leaked radiation. There was an
11 indication of civilian personnel who may have
12 been swimming in contaminated waters. And
13 there was a contention that there was no
14 monitoring for internal exposure from ingestion
15 or inhalation during these time periods.
16 Supporting that affidavit was a -- some
17 excerpts from a textbook on leukemia that
18 discussed an epidemiologic report done by
19 Caldwell, which showed a statistically
20 significant -- significantly elevated incidence
21 of leukemia at one test shot, I think it was
22 Operation SMOKY. And also it discussed the
23 fact that even -- there were low doses of
24 external exposure, but the epi study was
25 confounded by the fact that there was no

1 evidence of any internal monitoring to
2 supplement that dose to do the analysis.
3 The summary of the available monitoring data
4 that we were able to come up with from the
5 sources that we evaluated was that we found
6 that there was considerable external monitoring
7 data. We had evaluated a NIOSH database and we
8 found most people that had filed petitions from
9 the Pacific Proving Grounds -- almost all
10 people -- had external badge results, so there
11 apparently had been a large percentage of
12 workers had been badged. But we found no
13 evidence in our files of any internal
14 monitoring data. And in fact we ran acro-- we
15 encountered almost no internal exposure data
16 for any of the test shots.
17 There was some indication early on at Operation
18 CROSSROADS that some bioassay samples were
19 taken. However, we could not find these
20 records. And in looking at some of the data
21 that were publicly available, the quality of
22 the data and the reliability of the bioassay
23 data for the CROSSROADS tests were questioned.
24 These measurements were done on board ship with
25 available survey instruments. There did not

1 appear to be any long-range plan as to how
2 these things would be measured. There's some
3 evidence of beta activity and things of that
4 nature, but the data themselves do not appear
5 to have a very good pedigree.
6 There was some off-site air sampling. These
7 are primarily environmental samples that were
8 not taken with the intent of reconstructing
9 doses to the civilians. They were more on off-
10 site locations, and although they could be
11 related to the workers -- or the civilians'
12 exposures, we felt that it would be difficult
13 to do so. Or actually we felt there was
14 insufficient data to be able to do that.
15 Okay, let me go back -- let me go back to the
16 DTRA program again. You know, given that we
17 found nothing available for the traditional
18 bioassay sampling that we could reconstruct
19 internal doses, and we felt the area monitoring
20 -- the environmental monitoring data were
21 insufficient, we knew that DTRA was using an
22 approach that related the external dose results
23 on the badge, or some synthesis of the
24 environmental exposures using environmental
25 monitoring external data, to estimate the

1 internal dose. In other words, they take the
2 badge reading, and it would be directly
3 converted through this sophisticated computer
4 program into an internal exposure. It's a very
5 sophisticated model, blast -- it uses blast-
6 specific source terms based on the composition
7 of the individual fallout constituents. And
8 once the ground-based contamination is
9 assessed, then there's a resuspension factor
10 applied to estimate the internal dose.
11 This had some appeal to us. We did look
12 through it. But in reviewing this whole
13 program we did recognize that the National
14 Research Council did review this process in
15 2003, a fairly lengthy review was conducted by
16 the National Research Council, and there were a
17 number of findings that were identified that --
18 that questioned the credibility of the upper
19 bounds that were raised. The model themselves
20 -- the model itself was not said to be
21 insufficient or scientifically not valid. It's
22 just -- it was stated, and I'll quote you one
23 of the things that concerned us in this report.
24 It's stated that the sources of uncertainty --
25 sources and uncertainty of estimating

1 radionuclide concentrations in depositive
2 fallout based on external photon exposure have
3 not been evaluated, and the reliability of the
4 methods is unknown.

5 In other words, they were saying we don't --
6 we're not -- necessarily this is -- this is not
7 a valid technique, it's just that, you know,
8 one has not gone and looked at all these
9 sources of uncertainty and determined if it's
10 really valid for making these assumptions.
11 They never questioned that DTRA could not put
12 an upper bound on this program. In fact, I
13 would like to state that in our review, we were
14 evaluating this program only for purposes of
15 reconstructing doses with sufficient accuracy
16 under EEOICPA. We were not questioning DTRA's
17 ability to reconstruct doses for purposes of
18 their program.

19 But that finding was one of the findings --
20 there were -- but I should point out, and this
21 is one of DTRA's concerns, is that there were a
22 number of findings that indicated that doses
23 could be either underestimated or
24 overestimated. Now our evaluation report
25 focused on the overes-- or underestimating

1 conditions, but -- because we have to be able
2 to put an upper bound -- there is no real --
3 there was really no real indication in the
4 report, though, about the magnitude of the
5 corrections in either direction -- or the
6 uncertainties in either direction. So it's not
7 obvious to us from reading the report that
8 these things -- these countervailing factors
9 would cancel each other out and indeed the dose
10 reconstructions are sufficiently accurate.
11 DTRA did put together a plan of action and in
12 June of 2004 it indicated that they were going
13 to evaluate these issues and complete their
14 analysis in a two-year time frame, which would
15 put their completion date somewhere around June
16 2006 -- possibly six months or so from now.
17 Interim guidance was issued in July 16th by
18 DTRA that allowed them to move forward with
19 dose reconstructions. And in that interim
20 guidance, which is attached to the letter that
21 Dr. Blake sent NIOSH, it indicates that they
22 believe that if one multiplies internal doses
23 by a factor of ten, they would be sufficiently
24 bounding and put a credible upper bound on the
25 doses and would allow them to move their dose

1 reconstructions forward. We've not seen any
2 scientific analysis of that, and until such
3 time as we get a handle -- at least NIOSH feels
4 -- on the magnitude of the individual sources
5 of uncertainty, the fact of multiplying the
6 doses by a factor of ten would not constitute
7 sufficient accuracy under the requirements of
8 our program.

9 So in looking through all of the data -- the
10 available data and the DTRA program and the
11 evaluation report supplement, we revised the
12 class definition at Pacific Proving Grounds
13 from covering Operation HARDTACK 1 to the
14 definition you see on the screen, which is all
15 employees of DOE, DOE contractors or
16 subcontractors employed at the Pacific Proving
17 Grounds from 1946 through 1962 who were
18 monitored or should have been monitored for
19 exposure to ionizing radiation as a result of
20 nuclear weapons testing at the Pacific Proving
21 Grounds.

22 We did find evidence that sources of internal
23 exposure existed from these multiple
24 detonations of weapons, but the exposures to
25 the civilians were a result of contamination

1 caused by inhalation of fallout from the
2 nuclear detonations, not from the direct
3 exposure to the criticality event that occurred
4 when the weapons were detonated. And we
5 believe that, in looking at all the records, we
6 currently lack access to sufficient bioassay or
7 air monitoring data to estimate doses
8 associated with inhalation to radionuclides at
9 the Pacific Proving Grounds.
10 We further believe that health was endangered.
11 We cannot estimate these doses with sufficient
12 accuracy, and the evidence indicates that
13 workers may have accumulated internal exposures
14 through episodic intakes of radionuclides; that
15 is, from the resuspension of fallout and the
16 direct inhalation of fallout from the weapons
17 tests. These are internal doses. By nature
18 they are defined as chronic exposures and not
19 acute exposures, so therefore we -- we are not
20 suggesting that mere presence at this site
21 would constitute membership in the class. But
22 250 days, as defined in the regulation, would
23 constitute membership.
24 And this is the proposed class definition
25 again, and a summary. We're summarizing the

1 class as 1946 through 1962, it's not feasible
2 to reconstruct doses with sufficient accuracy,
3 and we believe health was endangered.
4 With that, I would be happy to answer any
5 questions.

6 **DR. ZIEMER:** Thank you very much, Jim. Let me
7 begin with a question on a slide, and I'm not
8 sure you actually put this one up. It's in our
9 book. The NIOSH claims tracking system
10 indicates there are 65 cases that would be in
11 this class. Is that number still correct -- in
12 the class as redefined?

13 **DR. NETON:** Yeah, that's right. I must have
14 skipped right through that one in my...

15 **DR. ZIEMER:** Now I'm curious about the next
16 line where it suggests that you actually have
17 completed some dose reconstructions, which
18 seems somewhat counter to what you said, so --

19 **DR. NETON:** That's correct.

20 **DR. ZIEMER:** -- just explain to us what that's
21 about.

22 **DR. NETON:** Yeah. This is not -- this has
23 happened with other SECs where, you know, we
24 have moved cases forward where we thought
25 possible. In reviewing the SEC petition

1 evaluation -- SEC petition, though, we've come
2 to the conclusion that the ones that we've
3 processed and moved forward have not been done
4 with -- reconstructed with sufficient accuracy.
5 This has happened at Y-12. In the past when
6 we've added classes we've actually moved a few
7 cases out, but in looking at the bigger picture
8 and the definition of sufficient accuracy,
9 we've come to that conclusion.

10 **DR. ZIEMER:** Thank you. My next question has
11 to do with the information sources. And I
12 noticed in the DTRA document -- I suspect maybe
13 Dr. Blake will speak to this, but there's a
14 suggestion that there are additional data
15 sources that NIOSH failed to look at. Could
16 you speak to that issue?

17 **DR. NETON:** Yeah, there was a suggestion that
18 there were some data sources available -- I
19 think in particular it was related to the
20 bioassay data themselves, related to some
21 medical files and some Naval transmissions and
22 that sort of thing. We have not seen those
23 data sources. They speak to the internal
24 bioassay data that we were looking for. And in
25 fact, in talking with the DTRA program

1 personnel, at least the contractor personnel,
2 they don't use those pieces of information
3 either in their program. Those are -- they
4 solely reconstruct doses based on the external
5 badge results. But we have not actually seen
6 the bioassay records.

7 I did mention that the CROSSROADS samples were
8 taken early on, done on board a ship, and I
9 think that the program itself had some
10 questionable pedigree as to how -- how well
11 they could measure what they were trying to do.

12 **DR. ZIEMER:** Is there any indication that those
13 sources would be readily available in a
14 reasonable time period that would allow one to
15 at least examine them for usefulness, or...

16 **DR. NETON:** I'd actually defer to Dr. Blake on
17 that question 'cause the --

18 **DR. ZIEMER:** Maybe when Dr. Blake speaks to --

19 **DR. NETON:** This is fairly new information that
20 we received -- yeah.

21 **DR. ZIEMER:** Yeah, I understand. We just -- we
22 just got the document I think a couple of days
23 ago.

24 Okay, Dr. Melius and then Mark.

25 **DR. MELIUS:** Yeah, Jim, I have a question. I

1 don't know whether it may be a question that
2 Department of Labor will need to answer, but I
3 believe this is the first time we've dealt with
4 a -- hear a SEC definition involving a
5 "monitored or should have been monitored", and
6 I'm just -- like to understand how that
7 determination is -- is made. I believe, if I
8 understand the process, once -- if this were
9 accepted, et cetera, that the Department of
10 Labor would be making that determination?

11 **DR. NETON:** That's correct.

12 **DR. MELIUS:** But I'm trying to understand here
13 how that -- how that (unintelligible). Is that
14 done by job classification in some way or job
15 description, or what is...

16 **DR. NETON:** Yeah, I might have to defer the
17 answer to that question to Department of Labor,
18 but the decision to narrow the class to workers
19 who were monitored or should have been
20 monitored was based after some discussion with
21 the Department of Labor and to focus the
22 membership in the class on those who were
23 actually exposed. If one does not have that
24 proviso there, then people who were never even
25 working in the presence of radioactive

1 materials that were employed working on the
2 Pacific Proving Grounds project, for example,
3 would be eligible.

4 **DR. MELIUS:** Yeah, I -- and that part I
5 understand. I'm just trying to understand how
6 you make it operational -- how you make that
7 determination 'cause -- particularly in this
8 situation where it might not be straight-- at
9 least not -- it doesn't seem straightforward to
10 me, that's all.

11 **DR. ZIEMER:** Here's Pete --

12 **MR. TURCIC:** That is the --

13 **DR. ZIEMER:** -- Turcic from Labor.

14 **MR. TURCIC:** That is the provision. That exact
15 provision is in all of the Congressionally-
16 mandated SECs.

17 **DR. MELIUS:** Correct, and that's why --

18 **MR. TURCIC:** Yeah, and the way we handle that
19 is by occupation.

20 **DR. MELIUS:** Yeah.

21 **MR. TURCIC:** At Amchitka the way we handled it
22 was by policy. We were able to identify that
23 there was ionizing radiation after the first
24 shot, so then presence after the first shot.
25 At the other sites it's the -- was badged or

1 should have been badged applies to what does
2 the policy -- what would a policy now --

3 **DR. MELIUS:** Yeah, okay.

4 **MR. TURCIC:** -- and then work backwards from
5 there.

6 **DR. MELIUS:** Okay. No, it just -- I realized
7 it was in the Congressionally-mandated SECs,
8 but we -- we -- it's never come up here and
9 we've never discussed it and I'm just trying to
10 understand how it would work. Thank you.

11 **MR. GRIFFON:** Jim, I was just wondering, you
12 mentioned -- either in the presentation or in
13 your written statements -- that you have
14 reviewed some cases, some DTRA cases?

15 **DR. NETON:** Just -- well, there was one case we
16 were provided a dose reconstruction.

17 **MR. GRIFFON:** Oh, just one case. Okay. And
18 did it include internal dose --

19 **DR. NETON:** Yes.

20 **MR. GRIFFON:** -- estimates?

21 **DR. NETON:** Yes.

22 **MR. GRIFFON:** And those were done -- I mean...

23 **DR. NETON:** They were internal dose estimates
24 based on -- I don't recall if it was from the
25 badge reading or the estimated, you know,

1 external exposure from environmental conditions
2 or survey measurements. But nonetheless it
3 would take the external result and estimate the
4 internal result from -- from the external and
5 report -- I think it's -- I'm -- it's a 50-year
6 committed dose to the organ as a result of that
7 exposure, so...

8 **MR. GRIFFON:** And it's your feeling that the
9 models that they used or are currently
10 implementing couldn't credibly bound doses for
11 the claimants in this population? Is that...

12 **DR. NETON:** That's correct, it could not bound
13 the internal exposures based on the -- based on
14 the current -- the NRC review that was done
15 that questioned the reliability and the
16 uncertainty of the method that had not been
17 demonstrated, we are not certain that the
18 exposures that are calculated for internal dose
19 at this point for this program are sufficiently
20 accurate.

21 **DR. ZIEMER:** Roy DeHart.

22 **DR. DEHART:** Jim, I'm curious about the numbers
23 that we're seeing up there, 65 case
24 definitions. Yet over the period of time I
25 would assume that there would have been perhaps

1 1,000 civilians all told through there. Has
2 there been any active program at this point in
3 time to notify or contact prior workers?

4 **DR. NETON:** Not to my knowledge.

5 **DR. ZIEMER:** Any additional questions for Jim?

6 (No responses)

7 If not, thank you, Jim.

8 **PRESENTATION BY PETITIONERS, DANIELLA KARO**

9 Then we will hear from the petitioner, Daniella
10 Karo. And incidentally, Daniella, I'm not sure
11 what the time is out there but I know it's very
12 early in the morning.

13 **MS. KARO:** Well, actually it's just, you know,
14 past 6:00 a.m. here, 6:18, actually.

15 **DR. ZIEMER:** Okay. Well, we appreciate your --

16 **MS. KARO:** Well, I appre--

17 **DR. ZIEMER:** -- early morning (unintelligible)
18 in being with us.

19 **MS. KARO:** Well, thank you for allowing me --
20 am I -- do I have the floor?

21 **DR. ZIEMER:** You may make your presentation
22 now, if you would, please.

23 **MS. KARO:** Well, I don't really have a
24 presentation, per se. I understand there is --
25 I read through the -- through the findings, you

1 know, to my understanding. I realize that
2 NIOSH has evaluated the data sources and they
3 were not able to come up with any sources that
4 were reliable enough to -- to make a
5 determination about the inhalation and
6 ingestion, et cetera. And then there's this
7 very elegant discussion about the various
8 formulas that DTRA is using and so forth. I
9 cannot really ask too many questions about this
10 because that is definitely not my area of
11 expertise.

12 But I do have a question to ask because perhaps
13 maybe I need a little bit clarification on
14 this. I noticed that NIOSH, in their summary
15 of their findings, seems to be bound by the
16 requirements that the workers were employed in
17 the Pacific Proving Grounds or in any other
18 places have to have established a number of
19 work days aggregating at least 250 days worked
20 there within the parameters established for the
21 class. And I know -- apparently this is --
22 Congress -- that decided to -- to limit, you
23 know, to 250 days, and apparently it specified
24 originally that there were a class of employees
25 that were included in the SEC and this were the

1 employees at the -- that were employed at the
2 gaseous diffusion plants and that's where they
3 (unintelligible) at least 250 days before
4 February, 1992. On the other hand, they have
5 allowed employees who were employed on the --
6 on Amchitka Island and were exposed to ionizing
7 radiation, and yet they were not required to
8 have an aggregate of 250 days. So can you
9 address some -- you know, some of these issues?
10 I'm concerned about this upper limit of 250
11 days because how did Congress come up to this
12 number, an aggregate number? What happens to
13 individuals who were there for several weeks or
14 let's say an aggregate of 150 days. How are
15 those people treated and why is an upper number
16 required in order to establish this kind of a
17 class, and yet there is an exception on the
18 Amchitka? These are my questions.

19 **DR. ZIEMER:** Very good question, and we will
20 ask NIOSH to address that. Let me mention that
21 one might argue that in -- at the test site
22 that the episodic nature of some of these might
23 argue for a different or modified approach to
24 that, as opposed to a workplace where there
25 might be chronic exposures. But there is some

1 rationale nonetheless for the 250, which itself
2 has a kind of built-in arbitrariness, but is
3 related to other sites where that's been the
4 criteria based on Congressional mandates. But
5 I'll let Jim speak to the issue particularly
6 here.

7 **DR. NETON:** I thought you did very well, Dr.
8 Ziemer.

9 I can't -- this is Jim Neton. I can't speak to
10 the legislatively-created Special Exposure
11 Cohort requirements for Amchitka Island. I
12 really just -- I have no idea as to why
13 presence was included at Amchitka and why 250
14 days was required at the gaseous diffusion
15 plant -- I mean why it was different than the
16 gaseous diffusion plants. I can say that
17 within our regulation the 250-day requirement
18 is there for essentially what you would
19 consider almost chronic-based exposure, not
20 something that happened as a discrete event
21 that endangered the health of the employees
22 within a short time frame where they would
23 experience very large exposures. And I think
24 the example provided in the regulation is such
25 as at a criticality event or incident.

1 Now one would argue that a nuclear detonation
2 is a criticality incident, but these people
3 were removed from the blast itself. I think
4 there was some exclusion zones around the
5 blast. And their exposures by nature were
6 chronic exposures to fallout that had either
7 deposited -- either inhalation of the fallout
8 or from resuspension of the fallout that had
9 been deposited on the ground, incorporated in
10 their bodies, and the dose is delivered over a
11 -- a time frame, a chronic time frame, not over
12 a very discrete period. So that's the basis
13 for our ruling -- or our decision, rather, that
14 the 250-day criteria applied.

15 **MS. KARO:** I see. I understand what you're --
16 when you're talking about the chronic exposures
17 versus the episodic nature, and yet -- I mean
18 somewhere in the report we're talking -- and I
19 think there was a reference to -- particularly
20 to a shot I believe in Enewetak, and may have
21 been the very last one, I'm not so sure, where
22 -- I'm trying to find my notes here -- in fact
23 the (unintelligible) at Enewetak Island
24 apparently was closed for one day because of
25 the fallout from an atmospheric test at Bikini

1 Atoll designated for -- that was in May 12, and
2 you're talking about resuspension -- so let me
3 ask you a question. So you're saying that
4 basically an individual had to be chronically
5 exposed in order to be affected while the
6 episodic nature kind of removed -- I mean
7 basically the individuals who were episodically
8 exposed may not have had any, you know,
9 exposures that may provoke any cancers. That's
10 the way I understand it.

11 **DR. NETON:** I'm not sure I'm following your --

12 **MS. KARO:** Well, my feeling is that you need a
13 chronic exposure -- we're trying to define how
14 we -- you know, Congress came up with this, you
15 know, 250 days. And so individuals -- it
16 sounds like you need individuals to be
17 chronically exposed in order to ultimately, you
18 know, come down with a cancer versus just an
19 episodic nature, which there is a likelihood
20 that the individual would not have that kind of
21 effect.

22 **DR. NETON:** I think I agree with what you're
23 saying in the sense that one -- the dose that's
24 delivered to devel-- to produce the cancer, if
25 it is received over a period of time from a

1 episodic nature -- and I don't necessarily say
2 it's chronic, but just over a period of time --
3 one needs to accrue that dose to endanger the
4 health, then the 250-day criteria would apply.
5 If the dose was received in a very short
6 duration, in a discrete incident, then the --
7 you know, the presence or the time frame would
8 be reduced to whatever that discrete time frame
9 was. But by nature, again, these are internal
10 exposures that are delivered over a period of
11 time.

12 **MS. KARO:** And is Amchitka Island an exception?

13 **DR. NETON:** Amchitka Island was legislatively
14 added by Congress, and yeah, it's -- it's
15 different than what we're -- it's different
16 than the regulations that we're working under
17 for this program.

18 **MS. KARO:** And the reason that they were
19 excluded from this 250 days was because?

20 **DR. NETON:** I can't answer that question.

21 **MS. KARO:** I see. That was my concern, because
22 I'm sure that there would be individuals who
23 probably were not there, you know -- or some
24 individuals may not have been there for an
25 aggregate of 250 days, and my concern is how

1 are those individuals going to be treated, on
2 an individual basis or how is -- how are their
3 petitions going to be treated, if indeed this
4 is not -- you know, if this regulation -- this
5 rule is going to be maintained and -- or
6 applied?

7 **DR. NETON:** I think, as with other SEC classes,
8 if a claimant does not -- or a case does not
9 have 250 days aggregate exposure, then they
10 would be referred to NIOSH for dose
11 reconstruction.

12 **MS. KARO:** And (unintelligible) --

13 **DR. ZIEMER:** What he's saying is there could
14 still be an attempt, in an individual case, to
15 do a dose reconstruction.

16 **DR. NETON:** That's right.

17 **DR. ZIEMER:** May -- may or may not be feasible,
18 though.

19 **DR. NETON:** We would do the dose
20 reconstruction, given the techniques that we
21 have available that we believe are sufficiently
22 accurate. In this case we're suggesting that
23 we can't do internal -- we -- at this present
24 time we do not have a technique to do dose --
25 internal dose reconstructions with sufficient

1 accuracy.

2 **MS. KARO:** And how is this going -- if an
3 individual is going to be considered outside of
4 a class, I suppose if this goes -- you go ahead
5 and accept this as a class, if an individual
6 does not meet that upper requirement of 250
7 days -- aggregate days, then my understanding
8 is you would be doing it on an individual
9 basis. And yet -- and yet how will you be able
10 to establish, you know, the dose exposure if
11 you don't have, you know, fully access to -- to
12 internal exposure, as well?

13 **DR. NETON:** That's a very good question. We
14 would attempt to reconstruct the doses that we
15 knew we could. And in this case, we believe
16 that the external dosimeter results are -- are
17 acceptable or sufficiently accurate for our
18 purposes of reconstructing doses, and we would
19 attempt to do an external dose reconstruction.
20 But we would not at this time, if this class
21 were added under these conditions, be able to
22 do internal dose reconstructions.

23 **MS. KARO:** And that's only for the people who
24 were in the class, but what about when you have
25 to -- to deal with them on a one by one basis

1 because they did not meet that upper 250 days?
2 Since you don't have a formula yet that would
3 allow you to figure out the internal dose, then
4 how are you going to, you know, treat those on
5 an individual basis then?

6 **DR. ZIEMER:** Perhaps the --

7 **MS. KARO:** How will you be able --

8 **DR. ZIEMER:** -- question is if they don't --

9 **MS. KARO:** -- to actually establish with some
10 accuracy the -- the dose exposure?

11 **DR. ZIEMER:** Yeah, perhaps it's -- the question
12 of if you have a case where you say actually we
13 can't reconstruct this dose and the 250-day
14 criteria is not met, what happens to that case,
15 is --

16 **MS. KARO:** That's correct.

17 **DR. NETON:** Well, all we're saying at this
18 point is we cannot accurately reconstruct the
19 internal dose. We would reconstruct the
20 external dose to the extent we could, and we
21 would use -- use that as a basis for our dose
22 reconstruction. But we would not be able to
23 add any internal dose because we don't have
24 tools --

25 **DR. ZIEMER:** And if the --

1 **DR. NETON:** -- to do that at this time.

2 **DR. ZIEMER:** If the person didn't meet the POC
3 criteria based on external, then the case would
4 be denied then --

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

6 **DR. ZIEMER:** -- apparently. Additional
7 questions, Daniella?

8 **MS. KARO:** No, that's -- that's all I have.

9 **BOARD DISCUSSION/RECOMMENDATION DR. PAUL ZIEMER**

10 **DR. ZIEMER:** Then let us hear from Dr. -- or
11 let me see if --

12 **MR. GRIFFON:** I was just going to ask Jim --
13 Jim, can --

14 **DR. ZIEMER:** Yes, Mark.

15 **MR. GRIFFON:** -- you describe the nature of --
16 of the work for these employees? I mean -- you
17 know, it seems like we're looking at this
18 (unintelligible), you know, they were there
19 during the fallout, I guess, but they probably
20 went back in and did recovery operations or --

21 **DR. NETON:** Yeah, I've looked at some of the
22 cases that we have in our files, and it's all
23 over the map. There are these scientific
24 couriers who were there delivering documents
25 and materials and things of that nature, all

1 the way to people who were operating land-
2 roving equipment, driving all over the -- the
3 islands and that sort of thing for -- for a
4 long -- long periods of time, reconstruction
5 activities, sort of construction activities, so
6 there -- it covers the waterfront of different
7 types of activities, from what I can see so
8 far.

9 **DR. ZIEMER:** Dr. Melius, another question?

10 **DR. MELIUS:** No, that was actually my question.

11 **DR. WADE:** Jim, I would --

12 **DR. ZIEMER:** Lew Wade.

13 **DR. WADE:** -- just like to maybe add some --
14 this is Lew Wade -- some clarification to the
15 petitioner's question and -- and the answer.
16 And please correct me if I'm wrong. What I
17 hear you saying is that it is your belief that
18 the people who might be considered for this
19 class were, in our opinion, shielded from the
20 high radiation associated with the particular
21 blasts. We -- we believe that they would have
22 been removed or in some way shielded from that
23 radiation.

24 **DR. NETON:** I wouldn't necessarily use the word
25 "shielded", but removed --

1 **DR. WADE:** Removed.

2 **DR. NETON:** -- is probably a better -- a better
3 term.

4 **DR. WADE:** And then they would be exposed then,
5 after the blast, in their work that they would
6 do and that's why we consider the -- the 250
7 days as appropriate.

8 **DR. NETON:** Correct.

9 **DR. ZIEMER:** In fact, I might add that in the
10 other episodic cases such as the Oak Ridge
11 criticality accident, the main issue was the
12 external dose, so you wouldn't specify someone
13 had to be there 250 days. If they were in that
14 room when the excursion occurred, then they
15 were qualified.

16 **DR. NETON:** That's correct.

17 **PRESENTATION BY DTRA, DR. PAUL BLAKE**

18 **DR. ZIEMER:** Now we'll hear from Dr. Paul Blake
19 with DTRA. Dr. Blake, welcome.

20 **DR. BLAKE:** Dr. Ziemer, members of the Board
21 and interested parties, thank you for affording
22 me this opportunity to address in the next five
23 minutes -- briefly, I hope -- how the
24 Department of Defense currently generates dose
25 reconstructions with regard to the Pacific

1 Proving Ground, and our plans for the future.
2 I serve as the program manager for the Nuclear
3 Test Personnel Review program at the Defense
4 Threat Reduction Agency. The Defense Threat
5 Reduction Agency, otherwise known as DTRA, is a
6 combat support agency of the Department of
7 Defense. DTRA functions as the executive agent
8 for DOD supporting radiogenic disease claims
9 brought forth by former DOD personnel who
10 participated in atmospheric nuclear weapons
11 testing from 1945 through 1962, served as U.S.
12 occupation forces of Hiroshima and Nagasaki, or
13 prisoners of war in the vicinity of Hiroshima
14 and Nagasaki when the detonations occurred in
15 1945.

16 DTRA supports the Department of Veterans
17 Affairs and, to a lesser extent, the Department
18 of Justice in evaluation of radiogenic disease
19 claims. The NTPR program has been in existence
20 since 1978, and has accumulated a wealth of
21 documentation associated with these nuclear
22 events, and developed methodologies for
23 generating dose reconstructions associated with
24 these events.

25 Generating dose reconstructions for atomic

1 veterans is technically challenging. This fact
2 was extremely well-documented in a recent
3 National Academy of Sciences National Research
4 Council report published in 2003 that Dr. Neton
5 referred to. It's entitled "A Review of the
6 Dose Reconstruction Program of the Defense
7 Threat Reduction Agency".

8 My agency has been busy in responding to the
9 challenges noted in this publication. We have
10 modified our procedures to overcome these
11 challenges. In fact, at the next meeting of
12 the Veterans Advisory Board on Dose
13 Reconstruction, a board very similar to yours
14 in function but mandated by Congress to oversee
15 the programs that I serve as program manager,
16 I'll be reporting on the status of that
17 progress.

18 One of the consequences of the NRC report was
19 for the Department of Veterans Affairs to
20 return to DTRA over 1,200 previously-generated
21 dose reconstructions and request that we rework
22 these dose reconstructions, correcting the
23 challenges noted in the 2003 NRC publication.
24 DTRA is in the process of responding to this
25 request.

1 However, my agency is greatly concerned that
2 the dose reconstructions be performed in a
3 timely manner since many of our veterans are
4 quite elderly and do not have many years to
5 live. Consequently we have made a conscious
6 decision to immediately address these concerns,
7 modify our procedures and begin releasing
8 revised dose reconstructions while the formal
9 process of publishing articles concerning our
10 revised techniques in peer-review journals and
11 releasing revised and new DTRA technical
12 reports on our public web site has preceded us
13 at a slightly slower pace.
14 This decision has led, in my opinion, to the
15 current situation being discussed today.
16 Namely, one government agency, NIOSH, has
17 determined that it lacks sufficient information
18 to estimate internal doses associated with
19 Pacific Proving Ground personnel, which a
20 different federal agency, DTRA, is currently in
21 the process of performing this function.
22 It is my expectation that this problem should
23 be resolved by the end of calendar year 2006.
24 DTRA, via its contractors and contract staff,
25 has drafted numerous technical reports in

1 response to the problems noted in NRC 2003. In
2 the next few months papers and reports will
3 begin to be published, and we expect the
4 majority of these will be released by the end
5 of this calendar year.

6 On another note, I would point out that many of
7 the internal dose challenges noted for the
8 Pacific Proving Ground become even more
9 challenging when addressed for the Nevada Test
10 Site, specifically the scenario of the nuclear
11 detonation blast wave resuspending radioactive
12 fallout from previous detonations, complicating
13 the determination of inhalation dose.

14 In conclusion, both NIOSH and this Board are in
15 a difficult position. You need to make a
16 timely decision, but you are faced with the
17 current dilemma of two federal agencies
18 proposing two very different solutions for
19 personnel who potentially inhaled radioactive
20 material while performing their duties during
21 atmospheric nuclear weapons testing at the
22 Pacific Proving Grounds. It is my hope that
23 this challenge will be resolved by the end of
24 this calendar year.

25 And with that, I'd like to open up -- if you

1 have any questions.

2 BOARD DISCUSSION/RECOMMENDATION DR. PAUL ZIEMER

3 **DR. ZIEMER:** Thank you, Paul. Could you --
4 aside from the issue of whether one can
5 reconstruct those doses or not, does DTRA have
6 a 250-day requirement on the individuals for
7 whom you reconstruct the dose?

8 **DR. BLAKE:** Well, the requirements actually
9 come from both the Department of Veterans
10 Affairs and Department of Justice with regard
11 to verification of -- to -- are they
12 participants at that place. And these were
13 mandated by Public Law. They're published in
14 the Code of Federal Regulations. But they are
15 different than your 250-day program. They're
16 much more of an episodic nature. The way
17 they're laid out is per -- it differs only
18 slightly between the Department of Justice and
19 Department of Veterans Affairs Code of Federal
20 Regulations. They are defined for each atomic
21 -- atmospheric atomic test, and there's a
22 certain period of time that, if a person was in
23 that area, then they qualify.
24 What we do in the Department of Defense is we
25 research the records -- and the military kept

1 very good records back then -- and we pull up
2 and verify, at least in the case of the
3 Department of Veterans Affairs, if that person
4 is a participant. And dependent upon the type
5 of radiogenic disease they have, they either
6 qualify for presumptive compensation or, in the
7 -- we have basically just primarily two cancers
8 now that we do dose reconstructions for, the
9 non-presumptive nature. It's primarily
10 prostate and skin cancer. And so almost all
11 the rest of the cancers are then presumptively
12 compensated through the Department of Veterans
13 Affairs.

14 **DR. ZIEMER:** Then is presence at, for example,
15 as little as one test -- would not exclude one
16 from being considered. You would basically
17 look at whatever dose you calculated for that
18 person?

19 **DR. BLAKE:** And that's exactly correct. What
20 we find in the case of the Pacific Proving
21 Ground is most of the military personnel
22 involved were part of the Navy, especially
23 those early tests like Operation CROSSROADS.
24 The reason we did those tests was to look at
25 weapons effects. And so the military put a lot

1 of people in place where Atomic Energy
2 Commission, the group that you're looking at,
3 had a lesser number of people. Our total
4 population is on the order of about -- when we
5 look at both Nevada Test Site and Pacific
6 Proving Ground, about 250,000 people, some of
7 which are now deceased. But many of those
8 sailors, for instance at the Pacific Proving
9 Ground, were on a ship and were there for only
10 a month or two before they departed. So they
11 certainly would not have qualified for the 250-
12 day figure that's being discussed here.

13 **DR. ZIEMER:** Can you give us some idea of the
14 extent to which the individuals who qualify
15 were -- are the doses -- do they tend to be
16 primarily external doses? Are these -- I'm
17 really getting at are these -- are the veterans
18 -- do they tend to be in closer than our
19 workers, or maybe we don't know that, but would
20 they tend to have a bigger contribution from
21 external dose, or do you know what the relative
22 contributions are, by your calculational
23 methods, external versus internal?

24 **DR. BLAKE:** By our calculational methods, in
25 general the external dose is the larger of

1 (unintelligible) --

2 **DR. ZIEMER:** The driver.

3 **DR. BLAKE:** The driver. There are a few
4 exceptions where internal dose is -- is a
5 concern. But the challenge that Dr. Neton
6 noted and that we have to over-- we have to
7 dwell with is that internal dose is -- is tough
8 to reconstruct based on the data that we have
9 from 50 years ago, and so the uncertainties are
10 normally larger with that component than the
11 external dose.

12 **DR. ZIEMER:** And what I'm trying to get at is
13 if the external is the driver, given its
14 uncertainties, it may be, in the DTRA case,
15 that the internal, even -- even if it's not
16 well known, has very little impact. Whereas in
17 our case, if our workers are driven by the
18 internal dose, that may become an overriding
19 issue in knowing that value with a degree of
20 accuracy that become much more important. I'm
21 -- I'm not sure that's the case. I'm kind of
22 asking, is there a difference in how the
23 veterans were positioned and stationed during
24 these tests versus these other workers? Did
25 they tend to be forward, for example, and

1 therefore subject to the external exposures
2 more than these workers? Do we even know that?
3 I think -- I would think we would, but...

4 **DR. BLAKE:** I can address that just roughly in
5 that many of our veterans were Navy personnel
6 on board ship close to the tests. I think -- I
7 believe more of the Atomic Energy Commission
8 personnel were back on the actual islands.
9 There were military personnel back there -- for
10 instance, communications people and so forth --
11 too, but probably the majority of veterans were
12 actually on ship for -- for this testing.

13 **DR. ZIEMER:** Uh-huh. So there may be some
14 differences in -- in how these populations were
15 exposed that might argue for perhaps some of
16 the reasons that we may have to approach them
17 differently, is all I'm saying. I'm concerned
18 myself about two agencies sort of having
19 different answers or different solutions, but
20 maybe there's a reason for that.

21 Dr. DeHart.

22 **DR. MELIUS:** Paul, can I ask, if it's okay -- I
23 have a sort of follow-up question to that that
24 I'd like to get clarified. And that is, are we
25 really dealing with sort of a mixed group, at

1 least on our side, some of whom will have the
2 char-- characteristics of exposure of the --
3 the Navy, the military personnel, and some of
4 which will have other -- you know, another --
5 you know, sort of a longer term exposure that
6 would be different and -- and -- and do we
7 really need to think about how do you separate
8 those two groups out or at least make sure we
9 address both those groups appropriately. So
10 some group may be more appropriately addressed
11 through sort of the -- the veterans program and
12 the other sort of addressed looking at sort of
13 this chronic exposure maybe where internal
14 exposures would be more -- more important. And
15 that's what I'm trying to wrestle with is -- is
16 understanding sort of what's the right way of
17 navigating this and -- and at the same time
18 that balance that you just said, so --

19 **DR. ZIEMER:** It's the other side of the same
20 question, and I think that unless one has that
21 kind of specificity in the information
22 database, it would be very hard to separate
23 that out. Any comment on that, Paul?

24 **DR. BLAKE:** I can't comment too effectively
25 'cause I'm not really familiar with the Atomic

1 Energy Commission personnel, sorry.

2 **DR. ZIEMER:** Okay. Roy DeHart.

3 **DR. DEHART:** My question is parallel to that,
4 basically. I am reasonably certain you had
5 Naval personnel on the ground doing contractual
6 activities -- Seabees and others who were doing
7 things along the atoll or islands -- similar to
8 the exact work that the civilians were doing.
9 They got out of the way when you got ready for
10 the blast. Then they went back in and did
11 whatever they did, creating dust and various
12 other things. So how are you handling those
13 civilians -- or those military who were on the
14 island -- not on the ships -- and would have
15 been extracted to some degree before an
16 explosion?

17 **DR. BLAKE:** We do the calculations on -- that
18 were addressed here with regards to internal
19 dosimetry, but primarily it's due to
20 radioactive fallout, usually in almost -- most
21 of the cases. We do look in every --
22 individual case whether there is concerns about
23 instantaneous radiation from the actual nuclear
24 detonation, but it -- in the vast majority of
25 cases our military personnel at the Pacific

1 Proving Ground were far enough away -- in the
2 case a mile or two -- that there was no
3 radiation from that instantaneous explosion.
4 And so radioactive fallout becomes the greatest
5 concern. And there were a few instances in the
6 Pacific Proving Ground where the winds shifted,
7 went the wrong way, and we actually had some
8 acute skin burns where -- and there's a classic
9 case, of course, of a Japanese fishing ship
10 that occurred. But some U.S. service personnel
11 at some radio communications stations also
12 received some significant doses.

13 Other personnel who've received some
14 significant doses, a little different than your
15 question, sir, but were some of our pilots and
16 people in aircraft that actually through --
17 flew through the radioactive plumes to pick up
18 data. But we certainly did have people on the
19 islands doing some similar, I believe,
20 exercises in locations that probably the Atomic
21 Energy Commission personnel were at, too.

22 **DR. ZIEMER:** Now Mark.

23 **MR. GRIFFON:** I just have a que-- I think you
24 sort of answered this question. There is some
25 statements in -- I forget if it's your

1 statements or Dave Kocher's statements on the -
2 - the internal dose and basically indicating
3 that some of -- of these -- some of the
4 findings and the -- and how to resolve those
5 findings have not been implemented at this
6 point -- or fully resolved, I guess. And in
7 the interim -- I think, if I'm reading this
8 right. In the interim, you have some of these
9 rules of thumb that you've put in place. Is
10 that correct?

11 **DR. BLAKE:** We call --

12 **MR. GRIFFON:** And then -- and then by the end
13 of 2006 you're expecting to have answer or --
14 or full resolution to -- to these issues.

15 **DR. BLAKE:** The NRC report really pushed for
16 doing full uncertainty analysis on our doses,
17 and obviously that -- it would be the
18 preferable method to do. The other approach,
19 though, is to calculate a maximum radiation
20 credible dose, and when we do our doses we
21 calculate out to a 95 percent credibility limit
22 on our calculations that we then forward over
23 to the Department of Veterans Affairs to do the
24 probability of causation calculation with
25 similar software to what this program uses.

1 What we ended up doing because of these large
2 uncertainties was basically assigning a factor
3 that we believe would be at least at the 95
4 percent or greater. A constant we try to
5 apply, give the benefit of the doubt to the
6 veteran. So in some cases where we may not be
7 able to say exactly the uncertainty is at the
8 95 percent confidence level, we actually do --
9 we -- we argue that we put in place a value
10 that may in fact exceed that.

11 Where the challenge has occurred with NIOSH is
12 that we've moved ahead -- implemented these
13 procedures, but we've not published them
14 publicly on our web site. And if you're a
15 different federal agency looking at the
16 procedures, you look at some of our
17 publications -- and one was alluded to on how
18 we calculate internal dose based on the
19 radioactive fallout. That publication is from
20 1985. We're in the process of releasing a
21 revised one here in the next few months. We've
22 gone through four to five major software
23 revisions on that particular code, bringing in
24 place ran-- values up from like ICRP-30 to
25 ICRP-66 and 67 on inhalation dose and so forth,

1 modernizing both the hardware and software.
2 But it is a sophisticated code and -- and a lot
3 of assumptions have to go into it because of
4 the circumstances we are under.

5 **MR. GRIFFON:** And I guess the -- the rules of
6 thumb, particularly this factor of ten that's
7 sort of mentioned in those statements, this --
8 this -- there is statistic basis to that --

9 **DR. BLAKE:** Yes --

10 **MR. GRIFFON:** -- (unintelligible) gets you up
11 near your 95th (unintelligible).

12 **DR. BLAKE:** We also have some other
13 publications that are -- that'll be published
14 shortly where we've done bounding analysis on
15 those values. Do we want to move away from
16 those factors, that's the reason we called them
17 interim guidance? Yes, we do. But we had to
18 do that, concerned with our veterans that we
19 had to move ahead with our dose
20 reconstructions, too. And we believe we gave
21 conservative factors at that time. But you'll
22 be seeing shortly other publications that our
23 contractors have worked on where we looked at
24 these concepts of fractionation and -- and
25 bounded them and believe, in most cases, that

1 this is a good figure.

2 **DR. WADE:** I have a comment to make here.

3 Well, first I'd like to thank you for being
4 here, and I'd like to thank you and your agency
5 for being so professional through this
6 behavior. You've been forthcoming and you've
7 approached this issue in a way that I think
8 brings honor on all of us that are federal
9 employees. I think you do high quality work
10 and I think no one disputes that.

11 As a federal employee in this case I'm not
12 embarrassed by the fact that two federal
13 agencies take a different position. What -- I
14 mean that's the way it happens sometimes when
15 you start at different points and move towards
16 a common objective.

17 I am heartened by the fact that this debate is
18 happening in a very open forum and we're
19 allowing the issues to be vetted fully. So I
20 thank you for your participation in that and
21 congratulations to your agency on its program.

22 **DR. BLAKE:** Thank you, sir.

23 **DR. ZIEMER:** Okay, Board members, any
24 additional questions? We want to give a full
25 airing to any of the issues, issues that are

1 raised, I think particularly by DTRA in terms
2 of this difference between the agencies and
3 some differences in how things are calculated.
4 But there are some even legal differences in
5 our laws that mandate certain things, so it's -
6 - it's not a bad thing that we're not exactly
7 parallel. We are trying to work together and
8 work closely on approaches as we move forward,
9 but this is one where, in part, there's also a
10 timeliness issue. It may be that one could say
11 well, let's wait six months till they come out
12 with their new guidance or whatever time it is,
13 and you have that issue is somewhat like we had
14 at Mallinckrodt, that there's -- it's a moving
15 target. So one of the timeliness factors I
16 think does come into play and we have to think
17 about that in terms of action, or lack thereof.
18 Henry, and then Richard.

19 **DR. ANDERSON:** I guess the question I would
20 have is it sounds like there are some methods
21 that have been developed, they just haven't
22 been made public or they're not completely
23 polished, and I guess my question would be is
24 it possible for those contractors or for NIOSH
25 to look at that and see if that approach

1 appears to be -- would meet their needs. I
2 mean we've -- in other petitions we've had, you
3 know, NIOSH saying they haven't done it yet but
4 they can do it, and then we said we'd like to
5 see some examples. But it seems to me there
6 may -- they may be far enough along in their
7 development of some of these that if NIOSH took
8 a look at that -- it wouldn't yet be public --
9 if that could be shared I think that might be
10 an interesting -- or a possibility to -- to see
11 whether or not the -- I mean NIOSH is saying
12 they don't think such an approach is possible,
13 so you know, when these come out, then it
14 either is possible or it isn't, so I wonder if
15 some kind of discussion with those, if -- if
16 that was possible, it wouldn't have to be --
17 wait till it's peer-reviewed and published.
18 Some part of a peer review would be NIOSH
19 taking a look to see what they're doing and if
20 the justification for how their interim have
21 been going are consistent with a more rigorous
22 science they may bring to bear might be a --
23 one thing that could be done quite quickly.
24 **DR. ZIEMER:** I think at the moment you're not
25 necessarily proposing that, but asking for

1 perhaps a reaction from --

2 **DR. ANDERSON:** (Off microphone)

3 (Unintelligible) saying it can't be shared --

4 **DR. ZIEMER:** -- from the two agencies --

5 **DR. ANDERSON:** -- (unintelligible) it's out of
6 the --

7 **DR. ZIEMER:** -- and -- and while we're letting
8 them ponder that a moment, Rich, did you have
9 an additional follow-up on that?

10 **MR. ESPINOSA:** No, not necessarily on that. I
11 was just -- I'm trying to wonder in my mind,
12 what were the living conditions? Did these --
13 were these workers shipped to the islands and
14 then taken off or did -- were there -- living
15 at the island? I'm trying to think of like
16 time-weighted averages.

17 **DR. ZIEMER:** Uh-huh. I'm not -- I don't know
18 if either -- either Paul or Jim can answer
19 that, or the petitioner, whether -- whether Ms.
20 Karo can answer that or knows, but --

21 **DR. NETON:** I really can't -- can't answer that
22 question. The problem with these cases is very
23 much like a lot of our cases where we -- we
24 lack a lot of information. We have a case
25 file. We have a -- potentially a job title,

1 and we know the person wore an external badge.
2 We know how long they were there, and that's
3 about it. So unlike --

4 **DR. ZIEMER:** Whether they were back and forth,
5 you don't really know.

6 **DR. NETON:** Yeah, and some of that is very hard
7 to figure out. On top of that, unlike the
8 military records, which tend to be a little
9 better as far as where these people were
10 stationed, we have statements that say the
11 person was there, and we don't know where they
12 were and we kind of know in general what they
13 may have done. So we have access to far less
14 information about what these people were doing
15 and where they were than even the military may
16 have.

17 **DR. ZIEMER:** Jim, while you're at the mike can
18 you react to Dr. Anderson's question?

19 **DR. NETON:** I suppose. I think --

20 **DR. ZIEMER:** Or maybe Larry Elliott will react.

21 **DR. NETON:** Maybe I'd better let Larry react to
22 that.

23 **DR. ZIEMER:** Let the boss react to that.

24 **MR. ELLIOTT:** No, I don't want to answer, but I
25 will try to answer. I think it certainly is a

1 possi--

2 **DR. ZIEMER:** Well, we're just exploring, is
3 this something that we should consider?

4 **MR. ELLIOTT:** It is a possibility. I was just
5 conferring with Dr. Blake, and I think we need
6 to -- it's a possibility that -- that could be
7 pursued, but it's going to result in time
8 expended. And we're okay with that if that's
9 the pleasure of the Board. I think -- you
10 know, my concern that I expressed to Dr. Blake
11 was what kind of perturbation would our
12 entrance into your review and approval process
13 present to you, and they have an advisory body,
14 as well. So my answer is yes, it's possible;
15 it comes with consequences and some of those
16 consequences we may not be able to fully
17 characterize at this point in time.

18 **DR. ZIEMER:** Uh-huh.

19 **DR. WADE:** Dr. Blake, you mentioned you would
20 be presenting to your advisory board. When
21 would that be?

22 **DR. BLAKE:** The interactions I have with my
23 advisory board are basically two-fold. On all
24 these technical publications that we're pushing
25 ahead, they are looking at them now. I have

1 not asked for a -- we have actual sub-groups on
2 our advisory board, and the sub-group that
3 interacts and does technical reviews -- in my
4 board there's a subcommittee number one on dose
5 reconstruction that's simply focused on our
6 processes. The chairman is a member of the --
7 one of the members of the NRC report from 2003.
8 They're providing a peer-review process of the
9 publications that are generated by my agency
10 through some of our contractors, too. But I
11 will --

12 The second part of it is when we actually have
13 formal Veterans Advisory Boards. Our next one
14 is due in June of this year, or July, in
15 Austin, Texas. And at that time I will be --
16 as Dr. Neton mentioned, we released a report to
17 Congress from both the Department of Veterans
18 Affairs and Department of Defense, mandated by
19 a Public Law, and I need to get back with them
20 on our get-well plan formally at that time
21 where we are. And so the majority of my formal
22 comments at that time will be in June.

23 **DR. WADE:** Thank you.

24 **DR. ZIEMER:** Jim Melius.

25 **DR. MELIUS:** Yeah, I -- two comments. First

1 addressing Richard's question, I think it was a
2 very good point and -- about where did -- where
3 were these people living when they were at the
4 site and where they stayed. That was actually
5 one of the rationales for the -- Amchitka not
6 having the 250-day requirement was the people
7 doing the work there lived on that island and
8 there were questions about their exposures sort
9 of 24 hours a day and sort of how do you weight
10 that and so forth. So I think that should be
11 pursued, and I would also wonder whether there
12 wouldn't be information -- probably not in the
13 interviews 'cause I don't think that's asked
14 for -- but some follow-up. I don't know to
15 what extent the claimants are still alive, how
16 many there are, if any, or -- but some of that
17 kind of issue could be pursued and information
18 sought from the survivors or from other --
19 other information that -- that might be
20 available, so I think that deserves follow-up.
21 I think back to Henry's comment and really sort
22 of -- sort of question, I think -- understand,
23 you know, the reason that yeah, there's some
24 initial time limits, but -- and there's also an
25 issue that we may not be able to totally

1 reconcile the way that dose reconstructions are
2 done in these two programs because they have
3 different legislative mandates and follow
4 different methods. However, to the -- I would
5 think we need to be very careful about sort of
6 institutionalizing a difference between the
7 programs and -- and the way that they're
8 approaching or utilizing certain types of data,
9 simply 'cause we didn't want to, you know, wait
10 a few months for, you know, a report to get
11 finished or -- or do a complete evaluation of
12 that. And we would be making a decision on a
13 Special Exposure Cohort that would -- is going
14 to go forward for a long period of time, and
15 yet it may turn out that in a few months or
16 several months that some of these issues that
17 we used as the basis -- might use as the basis
18 for approving a Special Exposure Cohort may be
19 addressed, and therefore we would have
20 institutionalized a difference that wasn't
21 really part of the difference in the
22 legislative mandates for these two programs.
23 And I think there's a need for -- I would --
24 even though there may be differences in the way
25 people worked and there are differences in the

1 laws, I think we need to be -- try to maintain
2 as much consistency as we can, and certainly
3 not have sort of unnecessary inconsistency
4 between the two programs. So I would certainly
5 feel much more comfortable waiting until we
6 could try to clarify some of these technical
7 issues.

8 **DR. ZIEMER:** Thank you. Roy DeHart.

9 **DR. DEHART:** Again this issue of disparity
10 between populations. We're sitting in Oak
11 Ridge, and I can assure you there is an
12 enormous emotional difference between people
13 who are awarded at X-10 and who are awarded at
14 K-25. That difference is painful for many of
15 these people and what we -- it sounds like
16 we're potentially going to be doing, there may
17 be grounds to do it, creating two different
18 systems for same kinds of exposure settings,
19 and I think we need to move slowly there.

20 **DR. ZIEMER:** Rich, I think your -- Rich
21 Espinosa's comment is one that it would be nice
22 if that could be followed up on. It seems to
23 me that it's fairly obvious many of these
24 people were indeed in place 24 hours a day on
25 those atolls and so on and therefore maybe one

1 would consider looking at the 250-day issue in
2 a somewhat different way for this kind of a
3 situation. Larry Elliott.

4 **MR. ELLIOTT:** Thank you. I just want to make
5 two comments and -- just for the Board's
6 consideration and understanding. At least 57
7 claims that you see on the screen that remain
8 to be dealt with, some of those come in in the
9 first batch we received in October of 2001.
10 Given that, you know, I'd just like to put that
11 on the record for those claimants who are
12 awaiting a decision.

13 Secondly, I would note in the three that have
14 been treated with dose reconstructions, one of
15 which that was found to be compensable had
16 multiple skin cancers and we did that using
17 external dose. The other two were found to be
18 non-compensable and I don't know the exact
19 cancer type, but I think both of those were
20 cancers that are in the presumptive list. So
21 just offer that for your information.

22 **DR. ZIEMER:** Michael.

23 **MR. GIBSON:** Yeah, on page 31 of 38 of the
24 petition in the book, the one dated 10/20, I
25 believe it is, at the top of the page it talks

1 about (reading) considerable attention to
2 recreational activity, personnel in the Entwok
3 (sic) island had two movie theaters, a TV
4 station, a hobby shop, a swimming pool, beach
5 areas designated for swimming, a skeet range,
6 playing fields, basketball and handball court -
7 - handball courts and a service club with a
8 snack bar, library, game room, rooms for adult
9 education classes and clubs. Competitive
10 leagues were organized for many sports.
11 Number one, it would take quite a length of
12 time to construct such facilities, I would
13 thing. And number two, I don't think that they
14 would go to that trouble, it wouldn't appear to
15 me, unless there was some extended amount of
16 time that people would have to stay on the
17 islands.

18 **DR. ZIEMER:** A good point, Michael. I want to
19 ask -- maybe I'll ask Paul Blake if he can
20 answer this, but -- or maybe Jim Neton can. We
21 know that in some cases -- for example, the
22 Marshall Islands where there was a shift in the
23 wind and the fallout really was concentrated on
24 one of the islands; they actually evacuated
25 those folks and they essentially have been off

1 the island ever since. It's been decades.
2 These locations were ones where the -- I don't
3 believe -- they were not in the direct cloud or
4 they wouldn't have had the people stationed
5 there. They must have gotten more peripheral
6 fallout, I presume. Do we have some idea of --
7 there were some air samples, were there not,
8 that give us some idea of the levels, and
9 you're using some kind of resuspension factor
10 so you must know something about these levels
11 that people were living with every day. And we
12 were, incidentally, in this country, as well.

13 **DR. BLAKE:** We did take extensive radioactive
14 fallout measurements there. But there were
15 cases, as I mentioned earlier, where the wind
16 did shift and there were some unexpected
17 consequences and that, you know, was
18 challenging to us. But most of that data not
19 only comes from film badge, but it's also from
20 the actual measured fallout -- some of which
21 was on land, but some of it was in -- obviously
22 in water samples, biological samples. There
23 was one group that was mentioned in Dr. Neton's
24 review, the University of Washington, that has
25 been doing this work for many years. So we

1 have a number of different sources of data that
2 we use in actually calculating this, but
3 radioactive fallout was measured fairly
4 effectively.

5 **DR. MELIUS:** Yeah, I think -- goes back to my -
6 - my first question I had about how people
7 qualified as -- issue of being badged, or
8 should have been badged. And I guess my
9 concern also would be that we may not be
10 qualifying people in the correct way for a
11 Special Exposure Cohort that -- it's not saying
12 that one might not be justified for some of
13 these simply based on the amount of information
14 available on their activities and -- and taking
15 into account where they lived, some of -- some
16 of the other uncer-- certainties here, but I
17 just think we would be able to do a much better
18 job and much fairer job for everybody involved
19 if we had more information to be able to work
20 from on -- on this and in -- particularly some
21 of -- either the additional scientific work
22 that's underway for the veterans, as well as
23 some further information, some further work on
24 the part of NIOSH in sort of describing this
25 group of people in this -- this cohort and sort

1 of figure out how we -- how we best address the
2 different groups that there are there.

3 **DR. ZIEMER:** Wanda Munn.

4 **MS. MUNN:** I don't know that what I'm thinking
5 adds anything to the debate, but there's no
6 question that there's -- in my mind, that
7 there's a difference between military personnel
8 and civilian personnel. There's a difference
9 in the way they were assigned and the way they
10 are monitored -- were monitored.

11 If the real question here is did people do the
12 same work, one set being military and the other
13 being civilian, and are those individuals with
14 the same exposures being treated differently, I
15 submit that it is unlikely we are ever going to
16 be able to have that information clearly in
17 hand at this stage. It was too far removed
18 from the actual events.

19 If it is also true that for most individual who
20 were long-term on the island the primary driver
21 is likely to be internal exposure, then our
22 choice appears to be to accept the fact that we
23 will never be able to assess parallel
24 activities between military and civilian
25 personnel in that group, and accept the fact

1 that we will be unlikely at this moment to
2 evaluate what internal dosimetry -- excuse me,
3 what internal doses were experienced by the
4 civilian workers who were there.

5 If we cannot do that, then our civilian workers
6 were in -- are in a definitely different
7 category than the military workers whose
8 exposure was characterized as being more
9 external than internal.

10 I don't know how long we can postpone making
11 the decision, and whether we can be very sure
12 that the DTRA process is going to be applicable
13 for us. If -- if we delay based on the
14 assumption that it will be and it's not, then I
15 suppose what we have to be reconciled to is the
16 fact that we will have to propose to those
17 people who are -- have been waiting for four
18 years for us to move forward that we're not
19 ready to move forward yet, we're still working
20 on it. That seems a very difficult choice, for
21 me, and I don't see any real assurance that
22 we'll be a lot better off once we see what Dr.
23 Blake has been able to complete with his
24 program.

25 Am I -- am I too far off, Dr. Blake?

1 **DR. ZIEMER:** All the way.

2 **DR. BLAKE:** Not completely, but I would like to
3 mention -- during the Pacific Proving Ground
4 exercises the -- and detonations there, it was
5 a joint task force that worked together of both
6 the AEC personnel and DOD personnel. For
7 instance, external dosimetry was -- used the
8 same types for both. And in fact the -- the
9 records now for the most part are maintained --
10 for the military, it's jointly funded by both
11 DOE and my program out in Las Vegas where we
12 have many of the older film badges that were
13 used. We've kept actual physical hard copies,
14 plus documentation of the film badges. Doses
15 are actually maintained out at the Nuclear Test
16 Archive in Las Vegas. It's a DOE-run facility
17 that I jointly, as program manager, co-fund.
18 So during all those years, at least with
19 external dosimetry, we tried very much to have
20 consistent methodologies between both AEC and
21 the military. Internal dose, though, does
22 remain a challenge, and there was no good
23 solution really at that time.

24 **MS. MUNN:** And --

25 **DR. ZIEMER:** Mr. Presley has some related

1 comments.

2 **MR. PRESLEY:** As one that did not work on an
3 above-ground shot, but one that has worked on
4 quite a few below-ground shots, you would have
5 a large contingency of what we would call at
6 that time (on microphone) AEC or ERDA personnel
7 that would be the group of people that would be
8 handling not only the shot material but the
9 shot equipment and things like this. You did
10 have DOD there. They were -- and they had the
11 Seabees and things like that, as Roy mentioned.
12 They were more of an observer. At that time
13 and present today, your AEC/DOE still handled
14 the everyday business of working with the
15 material, putting the weapons together, getting
16 it up in the air or down in the hole, whatever
17 it was. We did that as a -- as an atomic
18 worker contractor.
19 Then we would go back in and do the sampling
20 after the shots, and I have no reason to think
21 that things were any different, especially from
22 1956 to '62 when they were working on 17, 35
23 and 36 shots at a time. You would have a
24 tremendous people (sic) getting ready for each
25 one of these shots. You didn't just go in in a

1 day and pop one and walk out and go back the
2 next day and pop another one. It didn't happen
3 that way.

4 So yes, they were -- there was a lot of people
5 there. They did have permanent party
6 facilities. I would think that there's
7 probably about the same thing we used to have
8 at NTS in the early days was you lived in
9 quonset huts or tents and it was -- there would
10 be quite a few people working on that kind of
11 stuff. I -- I would not think that it would be
12 any different -- might be a whole lot more
13 modern, but it would be any different from when
14 I started out there in the '70s than it was
15 back in the '50s or the '60s.

16 **DR. ZIEMER:** But you're suggesting then that
17 the -- the military portion would be more
18 transient than the -- the folks doing the shots
19 are actually the AEC ERTA/ERDA folks.

20 **MR. PRESLEY:** That's correct.

21 **DR. BLAKE:** If I could comment, from Operation
22 CROSSROADS on, even though it was a joint task
23 force, there were really two functions. The
24 AEC people were focused on the weapon. And the
25 military was there primarily for weapons

1 effects. We needed to understand those effects
2 and how our troops are going to move ahead.
3 And so it was a different function with the two
4 groups. But in the Pacific Proving Grounds
5 many of those tests were weapons effects tests
6 and we brought in large amounts of military
7 personnel because of that.

8 **DR. ZIEMER:** Yeah. Thank you. Okay, Gen
9 Roessler and Jim Melius.

10 **DR. ROESSLER:** I feel like Wanda, I'm not sure
11 what I can add to this. But I do want to say
12 what I'm thinking at this point. I'm pretty
13 much convinced that we're dealing with two
14 different populations, for the most part, and
15 that would persuade me to go ahead and vote for
16 this petition at this time.

17 However, I've been sitting here listening to
18 the comments from everybody around the table
19 and from Dr. Blake and Dr. Neton, and I've been
20 going back and forth with my vote. I feel very
21 uncomfortable with that. I feel like maybe I
22 don't have enough information at this point in
23 time to -- to vote, even though if right now I
24 voted, it would be for the petition. And I --
25 I wouldn't be concerned that much about the

1 difference in the agency approaches because I
2 think it is a difference in the type of
3 exposures and type of population.

4 **DR. ZIEMER:** Thank you. Jim Melius.

5 **DR. MELIUS:** Jim, were you going to answer?

6 **DR. NETON:** Well, I was going to comment on
7 something a couple --

8 **DR. ZIEMER:** Oh, sure.

9 **DR. NETON:** -- of persons ago, so if I could --

10 **DR. ZIEMER:** Jim Neton, go ahead.

11 **DR. NETON:** -- interject here just briefly.

12 I'd like to follow up on the issue of the joint
13 task force and badging. It's true what Dr.
14 Blake said that there were joint task forces
15 and the badging was handled by -- and
16 consolidated in Nevada Test Site. In fact, of
17 the 57 people that I show we have external
18 badge results for, that's where we obtained the
19 results, the film badge results resided in the
20 Nevada Test Site.

21 The difference I see is that these people, even
22 though they were on the joint task force and
23 were badged, we have very little information
24 about what they were doing and where they were
25 the entire time. It's also complicated by the

1 fact that from 1958, I believe, the REDWING
2 series, not everybody was badged. They started
3 badging people I think around -- after '58, and
4 prior to '58 it was what we have come to call
5 in this group "cohort badging". You know,
6 certain people were badged. So then we faced
7 the dilemma of having to reconstruct external
8 dose to civilians based not -- knowing of their
9 whereabouts and using environmental survey
10 results to reconstruct the external, to then
11 turn around and reconstruct the internal based
12 on the reconstructed external. It just
13 multiplies on top of each other. So it is a
14 somewhat more difficult process, I think, than
15 what you would see with the military.

16 **DR. MELIUS:** Yeah, actually I think it -- were
17 sort of two issues that I think need to be
18 addressed, but I think the main point is that
19 DTRA -- Dr. Blake says that they have some
20 significant, you know, technical information
21 currently being developed that would address
22 the main technical basis for the SEC
23 determination, the issue of internal
24 monitoring. And as I understand it, they've
25 offered to -- now to make that information

1 available to NIOSH and -- in some way through -
2 - through a process. And I would think that it
3 would be appropriate for us to delay
4 consideration of this petition till our next
5 meeting. In the meantime, ask NIOSH to address
6 two things. One is work with DTRA and, you
7 know, take a look at this technical information
8 and make a determination, is it going to
9 address the concerns or not, and sort of -- you
10 know, what is -- what would be the timing for
11 that, how -- how long would it take before this
12 information could or could not be used for dose
13 reconstructions -- is it going to be adequate
14 (unintelligible) that. And I -- again, for the
15 reasons I've said before, I -- I'm just
16 uncomfortable -- you know, if in a few month
17 suddenly our concerns have been addressed.
18 Secondly, I do think we need to also address
19 this 250-day issue. With the people living
20 there -- again, it may not be significant
21 exposure because of location or whatever, it
22 may be able to be taken into account in the
23 dose reconstruction, but it is something
24 different and I think we need to be careful for
25 this circumstance in terms of how we qualify

1 these -- these people. So I would ask NIOSH to
2 also address that over the next -- between --
3 by our next meeting, at least to --

4 **DR. ZIEMER:** I'm --

5 **DR. MELIUS:** -- come back with some additional
6 information to us on --

7 **DR. ZIEMER:** I'm not going to recognize that at
8 this point as a motion, but as a possible
9 motion. I want to hear from Roy DeHart and
10 then Richard Espinosa.

11 **UNIDENTIFIED:** (Off microphone)

12 (Unintelligible)

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

14 **DR. DEHART:** I've just been signaled that I'm
15 on. I propose the following motion: That the
16 Board thank NIOSH for its report related to the
17 SEC petition; further that the Board move to
18 table further discussion to a time certain to
19 allow possible conferences and discussion
20 between NIOSH and DTRA and to address other
21 issues as previously stated by the Board.

22 **DR. ZIEMER:** This in essence is a motion to
23 table. Is there a second?

24 **MR. PRESLEY:** I second.

25 **DR. ZIEMER:** This is not a debatable motion.

1 We must immediately vote. This is a vote to
2 table, and it's to a time certain, which is the
3 next face-to-face meeting.

4 Just by way of instruction, if you do not wish
5 to table -- and there could be an alternate
6 motion, such as Jim suggested. If you do not
7 wish to table, which ends our debate today,
8 then you will vote no. If you wish to table
9 with a time certain that it comes off the table
10 at the next meeting, you will vote yes.

11 Any procedural questions?

12 (No responses)

13 Okay, we're going to vote by hand -- raising
14 your hand. All in favor of tabling the action
15 -- motion to table any action on this petition
16 -- actually the Chair's going to change the
17 ruling. We have nothing -- we do not have a
18 motion before us to table. Roy, we don't have
19 a motion before us to table.

20 **UNIDENTIFIED:** (Off microphone)

21 (Unintelligible) don't have a motion

22 (unintelligible).

23 **DR. MELIUS:** There's nothing to table.

24 **DR. ZIEMER:** There's nothing to table,
25 actually.

1 **DR. DEHART:** Okay.

2 **DR. ZIEMER:** What we would -- what we would
3 need would be --

4 **MR. PRESLEY:** A motion --

5 **DR. ZIEMER:** -- a proposed action, which could
6 then be tabled.

7 **DR. DEHART:** Yes.

8 **DR. ZIEMER:** We have -- we have a petition
9 evaluation report, which in essence comes as a
10 request for action. I guess -- we still need a
11 motion to -- to do something with that, so --
12 but hang on, we'll get a comment from Jim.

13 **DR. NETON:** I'd just like to make one comment.
14 I want the Board to understand the reality of
15 what's going to happen if this thing gets
16 pushed to the next Board meeting, which is --
17 in discussion with Dr. Blake, it's unlikely
18 that we will -- NIOSH will receive any peer-
19 reviewed report in time to be -- to evaluate
20 any changes on our decisions here. So it may
21 quite be likely that I would come back here in
22 April and say we -- we have not seen anything
23 fleshed out in detail.

24 Now there may be some preliminary approach
25 design documents that he could provide to us,

1 but there is unlikely to be -- in time for the
2 next Board meeting, us to have additional
3 information to weigh in on.

4 **DR. ZIEMER:** Thank you. Mike?

5 **MR. GIBSON:** It seems to me that we as a Board
6 have been very concerned about time limits, the
7 180-day time limit, dragging things on and
8 doing things in a timely manner, and I just
9 wonder if tabling this motion would buy us
10 anything.

11 **DR. ZIEMER:** Thank you. We're not actually
12 discussing a motion to table 'cause it's not
13 discussable (sic), but you're talking
14 theoretically, if one were to make such a
15 motion -- okay.

16 Robert Presley.

17 **MR. PRESLEY:** I'd like to make a motion that we
18 accept this petition, as read.

19 **DR. ZIEMER:** Okay, that's a valid motion. Is
20 there a second?

21 **MS. MUNN:** Second.

22 **DR. ZIEMER:** Now we have before us an action.
23 That is a motion to accept the petition -- and
24 actually it's to accept the recommendation of
25 NIOSH to grant the SEC petition, and if this

1 motion passed it would be a recommendation to
2 the Secretary of Health and Human Services that
3 SEC status be granted. This is a debatable
4 motion.

5 Wanda.

6 **MS. MUNN:** I have one question for NIOSH, or
7 for Dr. Blake, whoever is best qualified to
8 answer it. Can we make the assumption, or do
9 we know for a fact, that resuspension and
10 internal dosimetry for individuals on those
11 islands would vary from location to location on
12 the islands? Can we make that statement?

13 **DR. BLAKE:** Yes, they certainly do vary.

14 **MS. MUNN:** They vary.

15 **DR. BLAKE:** Yes, they do vary.

16 **UNIDENTIFIED:** Can you hear that, Ray?

17 **MS. MUNN:** If they vary, then I am back to my
18 comment earlier. I do not believe it is
19 possible for us to ever define where these
20 workers were at any given time on that island
21 and therefore cannot, with any degree of
22 specificity, come to a conclusion with respect
23 to their internal dose.

24 **DR. ZIEMER:** So you are speaking for the
25 motion.

1 **MS. MUNN:** I am speaking for the motion.

2 **DR. ZIEMER:** Jim Melius.

3 **DR. MELIUS:** Yeah, I would just like to point
4 out on Wanda's point that that is not one of
5 the claims that -- one of the claims that NIOSH
6 has made in its evaluation. I don't believe
7 that point was raised, unless I --

8 **DR. NETON:** That -- the resuspension factor is
9 one of the key issues raised by the National
10 Research Council.

11 **DR. MELIUS:** Okay.

12 **DR. NETON:** And the uncertainty associated with
13 the resuspension values --

14 **DR. MELIUS:** Is it uncertainty of location or
15 uncertainty --

16 **DR. NETON:** Not on location, but uncertainty of
17 -- of -- well, they were talking about
18 uncertainty of resuspension on the ships versus
19 the island and such, but there is significant
20 uncertainty associated with the resuspension
21 factor.

22 **DR. MELIUS:** I was more reminding us that if we
23 were going to use that for a basis we needed to
24 -- for an SEC, we needed to capture that
25 specifically in however we make our

1 recommendation.

2 My question, though, is back -- I thought I
3 understood Dr. Blake to say that he was going
4 to make some of the technical work that was
5 currently underway available to NIOSH prior to
6 it being published in peer review journals, and
7 I --

8 **DR. WADE:** Dr. Blake --

9 **DR. MELIUS:** -- the sort of discrepancy here in
10 terms of -- of what Jim and Larry just said and
11 what I understood you to say earlier, I'm just
12 trying to understand it and --

13 **DR. WADE:** Could you please clarify, sir, just
14 what would happen between now and the end of
15 April in terms of interactions between your
16 staff and NIOSH toward shedding light on this
17 issue of internal exposure?

18 **DR. BLAKE:** When I get back tomorrow to my own
19 agency, I can release some of our preliminary
20 design documents on how we're actually moving
21 towards these publications. Many of them are
22 basically written, but they need to go through
23 a formal peer review process, not -- at least
24 for the DTRA technical reports, before we
25 publish them and put them perhaps in a slightly

1 more readable format. Then our plans are to
2 actually put them through our subcommittee
3 dose reconstruction board to have an outside
4 look at them before we move ahead. The report
5 of greatest concern right now is one that's due
6 out -- that I release some preliminary
7 information on tomorrow, but it's only about a
8 two-page summary. The report itself is an
9 update on the FEDOS, the software code model.
10 That's not due for publication until about the
11 end of March or April. And then with a peer
12 review process, let's assuming a month in
13 putting it in, it won't be ready for your next
14 Board. I can't promise that. And that's the
15 reason I said end of calendar year 2006. There
16 are a number of other technical reports that
17 are -- that may be a little more advanced than
18 that. But once again, I do have only limited
19 number of personnel to get them out in a timely
20 manner.

21 **DR. ZIEMER:** Paul, are you able -- well, number
22 one, you're saying you have no guarantee that
23 the end product will look like what you have
24 now since there's some iterations that you have
25 to go through.

1 **DR. BLAKE:** True.

2 **DR. ZIEMER:** Number two, are you able to
3 personally commit your agency to sharing this
4 information outright with another agency at
5 this point? Are you authorized to make that
6 commitment? Well --

7 **DR. BLAKE:** I believe -- I believe I am, sir,
8 and I don't --

9 **DR. ZIEMER:** Well, I just want to make sure.

10 **DR. BLAKE:** -- I don't expect that'll be a
11 problem, but whenever you ask someone in the
12 federal government --

13 **DR. ZIEMER:** Well --

14 **DR. BLAKE:** -- are you authorized, we always
15 take a breath before we --

16 **DR. ZIEMER:** -- as far as you know.

17 **DR. BLAKE:** As far as I know, sir, yes.

18 **DR. ZIEMER:** Roy DeHart and then Henry and
19 Rich.

20 **DR. DEHART:** I propose the motion that you have
21 previously heard as to tabling.

22 **DR. ZIEMER:** Okay. We now have a motion to
23 table this motion, and that proposed motion to
24 table was to table to our next meeting. And
25 was there a second to the motion to table?

1 **DR. MELIUS:** I'll second that.

2 **DR. ZIEMER:** Okay, this is a motion to table
3 the action that was proposed by Mr. Presley.
4 All in favor of tabling, raise your right hand.
5 One, two, three, four, five.

6 Those opposed?

7 One, two, three, four --

8 **MR. ESPINOSA:** Abstain.

9 **DR. ZIEMER:** One abstention. We have -- what,
10 we have five --

11 **DR. WADE:** Five to four with one abstention.

12 **DR. ZIEMER:** -- four and one. The Chair voted.
13 We have ten. Tabling requires a majority of
14 those voting, but the abstention is not
15 ignored. We have -- it still requires six, I
16 believe, is -- unless I get overruled,
17 Parliamentarian-wise.

18 **MR. PRESLEY:** Could I change my vote?

19 **DR. ZIEMER:** You want to change your vote?
20 Yes, you can.

21 **MR. PRESLEY:** I'll vote to table.

22 **DR. ZIEMER:** We now have six votes --

23 **DR. WADE:** Let's take a -- let's take the vote
24 again, please.

25 **DR. ZIEMER:** Raise your right hand if you're

1 voting to table.

2 One, two, three, four, five, six. Okay.

3 **THE COURT REPORTER:** Dr. Ziemer, who changed
4 their vote? Was that --

5 **DR. ZIEMER:** Mr. Presley. The vote is to table
6 the action until the next meeting, and it is so
7 ordered.

8 Now I'm going to have a brief recess, and after
9 the recess I'm going to ask for a motion that
10 will provide instruction to NIOSH as to what
11 should occur between now and the next meeting,
12 since the motion to table leaves things in a
13 vacuum. Okay? And we'll get the additional
14 comments at that point.

15 Let us recess for 15 minutes, and then
16 reconvene. Okay, Daniella, if you're still on
17 the line, you may wish to remain. We will try
18 to provide some instruction to NIOSH on -- as
19 to what should occur.

20 **MS. KARO:** Thank you, sir.

21 (Whereupon, a recess was taken from 10:30 a.m.
22 to 10:55 a.m.)

23 **DR. ZIEMER:** Okay, let us proceed. We do have
24 some additional action to take. Having tabled
25 the action on the Pacific Proving Grounds, we

1 do need to provide some instruction as to what
2 we expect to happen within the next week.
3 Also, in terms of information from another
4 agency, we do have some advice from legal
5 counsel. I'm searching for the right word, but
6 Liz, can you advise us in terms of what we can
7 and can't do with information from another
8 agency?

9 **MS. HOMOKI-TITUS:** Certainly. Liz Homoki-
10 Titus, (unintelligible) HHS. I'm not sure it's
11 advice, it's just a concern that you need to be
12 aware of that if another department provides
13 information to HHS that is not publicly
14 available -- I guess I just want to expand on
15 Dr. Ziemer's question to DOD regarding the
16 release of that information to the Advisory
17 Board and to the public. Obviously when
18 information is released to a FACA advisory
19 board -- can you hear me okay?

20 **UNIDENTIFIED:** (Off microphone)
21 (Unintelligible) and start over.

22 **MS. HOMOKI-TITUS:** (Off microphone) You want me
23 to start again?

24 **THE COURT REPORTER:** Excuse me?

25 **DR. ZIEMER:** Ray, does she need to start again?

1 **THE COURT REPORTER:** Oh, no, you can go
2 forward. Thanks.

3 **MS. HOMOKI-TITUS:** Okay. When it's released to
4 a FACA advisory board it's obviously made
5 public, or we would have to take the Board into
6 closed session to consider that information, so
7 I just want you to be aware of those possible
8 options. And I don't know if the
9 representative from DOD wants to address that
10 concern --

11 **DR. ZIEMER:** Well --

12 **MS. HOMOKI-TITUS:** -- regarding that
13 information --

14 **DR. ZIEMER:** -- at least be aware --

15 **MS. HOMOKI-TITUS:** -- becoming public.

16 **DR. ZIEMER:** -- aware of that, and it may be
17 that if, for example, we suggest that NIOSH get
18 together with DTRA on that issue, that Jim
19 Neton or his designee can report back to us
20 whether they found they could utilize whatever
21 is being done, without necessarily releasing
22 information at that point would be another
23 option. But I guess we do want to make sure
24 Dr. Blake is aware that if the information
25 fully comes to the Board, it gets made public.

1 So that's -- that's the point.

2 Now the Chair will recognize Dr. Melius for
3 purposes of making a motion.

4 **DR. MELIUS:** Yeah, I would like to -- not only
5 would I like to, but I am making a motion --

6 **DR. ZIEMER:** He doesn't like to, but he will do
7 it.

8 **DR. MELIUS:** -- to make a motion to request
9 that NIOSH follow up on three items in
10 relationship to this petition.

11 Number one was what Liz was just referring to -
12 - to, which is to gather further information,
13 evaluate the current technical work that's
14 underway at DTRA, that -- particularly that
15 addressing the internal dose monitoring and
16 evaluation of internal dose.

17 Number two, we're asking NIOSH to conduct
18 further evaluation of the types of work and the
19 work pattern for people working at the Pacific
20 Proving Ground, particularly we're trying to
21 better understand what types of work, what the
22 nature of the exposures for people in different
23 work categories, and also addressing the
24 clarification on -- to what extent people were
25 living there and people who were in residence

1 there, how they were exposed as part of their
2 living condition.

3 And number three, specifically how to address
4 this -- best to address this issue of
5 qualification for the cohort, both the
6 classification as having -- being monitored or
7 likely to -- I think it's supposed to be
8 monitored or should have been monitored, in the
9 context of these workers. And also whether
10 it's appropriate to it if people were residing
11 at the site and exposed during their
12 residential hours, should the 250-day
13 requirement be adjusted to take that -- that
14 into account for those workers. Remember, we
15 have a 250-day work-day requirement and that
16 may not quite make sense in terms of -- it
17 doesn't make sense in terms of people are --
18 are living on the site and exposed, you know,
19 24 hours a day, essentially -- at least in some
20 manner, and I think that --

21 **DR. ZIEMER:** Okay.

22 **DR. MELIUS:** -- that needs to be --

23 **DR. ZIEMER:** Right.

24 **DR. MELIUS:** -- addressed in the context of the
25 --

1 **DR. ZIEMER:** Now you can --

2 **DR. MELIUS:** -- Special Exposure Cohort.

3 **DR. ZIEMER:** -- speak in support of the motion
4 in a moment, if it's seconded.

5 **DR. MELIUS:** Okay.

6 **DR. ZIEMER:** Is there a second to the motion?

7 **MR. ESPINOSA:** I second.

8 **DR. ZIEMER:** Now it's seconded. Now any
9 debate, pro or con, for this motion? Anyone
10 speaking in favor of the motion?

11 **THE COURT REPORTER:** Dr. Ziemer, who seconded?

12 **MS. MUNN:** DeHart.

13 **DR. ZIEMER:** DeHart? Okay. DeHart seconded.
14 Jim, I'd like to ask you to clarify for the
15 Chair, when you said address the qualification
16 of should have been monitored, what are you
17 asking for there? Is that a different request
18 than the evaluation of the 250-day requirement?

19 **DR. MELIUS:** I think it's part of that. It's -
20 - it's slightly different, but in light of the
21 different groups that are being evaluated or
22 could be potentially included in a Special
23 Exposure Cohort, I just wanted to make sure
24 that that particular requirement makes sense
25 for -- is appropriate for different groups.

1 And I think we're going to find that there were
2 a number of different categories of workers
3 here and I just want to make sure that's
4 appropriate for those -- those workers. Again
5 we go back to (unintelligible) what does it
6 mean to be monitored or should have been
7 monitored.

8 **DR. ZIEMER:** Do we know whether -- where that
9 monitoring occurred for people stationed -- was
10 that monitoring 24 hours a day as opposed to a
11 usual worker that leaves their badge at the
12 gate when they leave a facility? Paul, do you
13 know the -- whether that was the case or not?
14 Or did these workers wear their badges --

15 **DR. BLAKE:** (Off microphone) I don't know
16 (unintelligible), sir.

17 **DR. ZIEMER:** Okay. Paul says he doesn't know.
18 Robert?

19 **MR. PRESLEY:** When I worked at the test site
20 you wore your badge everywhere you went. You
21 were on the site all the time, 24 hours a day,
22 7 days a week.

23 **DR. ZIEMER:** Okay. Thank you, that's helpful.
24 I think Rich Espinosa and then Michael.

25 **MR. ESPINOSA:** I speak in favor of the motion.

1 My biggest concern is the -- under the law, the
2 250 days. I believe that if it was passed
3 today, that's -- might -- the way the law reads
4 that a lot of these people that are defined
5 under the class would be denied on the basis of
6 250 days, so I speak in favor of the motion and
7 I do believe that this Board could look for
8 ways and get around and make a recommendation.

9 **DR. ZIEMER:** Thank you. Michael.

10 **MR. GIBSON:** I also speak in favor of the
11 motion and I would just offer perhaps a
12 friendly amendment. If there's not issues
13 dealing with classified information or if there
14 is, if there's a member of the Board that's got
15 the proper clearance, could a member of the
16 Board be present during these discussions with
17 NIOSH and DTRA?

18 **DR. ZIEMER:** I think the answer is yes, that
19 could be done.

20 **MS. HOMOKI-TITUS:** It's not a question of
21 clearance, it's simply that these are internal
22 documents that haven't been released to the
23 public, so yes, a working group of the Board
24 could work with NIOSH in those meetings. Can
25 you hear me okay? But it's a matter of when it

1 becomes public if it's given to all of the
2 Board.

3 **DR. ZIEMER:** Thank you. Other questions or
4 comments?

5 (No responses)

6 Are you ready to vote on the motion then?

7 **MR. GRIFFON:** Was that accepted as a friendly
8 amendment?

9 **DR. MELIUS:** Yes.

10 **MR. GRIFFON:** Okay.

11 **DR. MELIUS:** Very friendly.

12 **DR. ZIEMER:** So point one of the motion asking
13 -- asking NIOSH to gather further information
14 from DTRA on internal dose would include the
15 caveat that this be done with a Board member or
16 members present.

17 Are you ready to vote on the motion?

18 **UNIDENTIFIED:** Yes.

19 **DR. ZIEMER:** All then in favor, say aye?

20 (Affirmative responses)

21 Those opposed, no?

22 (No responses)

23 Any abstentions? One abstention, Wanda Munn
24 abstaining.

25 Motion carries. Thank you very much. I don't

1 know if Daniella's still on the line.

2 **MS. KARO:** Yes, actually I am.

3 **DR. ZIEMER:** Do you have any additional
4 comments --

5 **MS. KARO:** No, not really. Not at this point.

6 **DR. ZIEMER:** Then we will make sure that we
7 make arrangements to have you present at the
8 next meeting, by phone if necessary, and
9 perhaps we can arrange the schedule so that it
10 is not quite so early in the morning.

11 **MS. KARO:** Yes, it would be greatly
12 appreciated.

13 **DR. ZIEMER:** Okay. And we thank you for
14 participating with us today.

15 **MS. KARO:** Thank you.

16 **DR. ZIEMER:** You're welcome to stay on, but you
17 probably would rather do something else.

18 **MS. KARO:** That's true.

19 **DR. ZIEMER:** Wouldn't we all.

20 **DR. WADE:** Not me.

CLASSIFIED DATA: IMPACT ON BOARD SEC
PETITION RECOMMENDATION
DR. LEWIS WADE, EXECUTIVE SECRETARY

21 **DR. ZIEMER:** Okay. Next on our agenda we have
22 an item called classified data, impact on Board
23 SEC petition recommendation, and Dr. Wade has
24 that issue. And I believe we have a document -

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DR. WADE: I've given out a --

DR. ZIEMER: -- that's been distributed called "Classified Information".

DR. WADE: And it's on the table. Before I begin that, I would like to, for the record, point out that I'm operating on the belief that following this meeting the new members will be duly impaneled. So if you were to start to consider Board members listening in or participating, then we have the new members to consider.

Okay, to the issue on the agenda. I think you'll all remember this issue. It was at one point a very emotional issue. On your behalf -- you had written to the Secretary of HHS. On your behalf I met with representatives of the Secretary's office and representatives of HHS's Office of General Counsel last week to -- to try and bring this issue to a head. Based upon those discussions they empowered me to come to you with this position. So the position I bring you is the HHS position, and let me walk you through it.

Under classified information, the first bullet

1 says (reading) Based upon legal advice of the
2 Department of Justice, Office of Legal Counsel,
3 it has been concluded that non-disclosure to
4 the public of classified or restricted
5 information does not qualify a class for
6 addition to the SEC if a sufficiently accurate
7 dose reconstruction is otherwise feasible using
8 classified or restricted information.

9 I pointedly asked the people I met with if this
10 opinion from the Department of Justice was
11 rendered in writing. I was told that it was
12 not. It was a verbal opinion of the Department
13 of Justice that formed the basis of this
14 written statement that HHS is making. I asked
15 them again, and they assured me that there is
16 no written opinion of the Department of
17 Justice.

18 The second bullet says (reading) Therefore, the
19 Secretary -- read HHS -- has no legal authority
20 to grant a Special Exposure Cohort petition
21 because classified or restricted information
22 was used to determine that a sufficiently
23 accurate dose reconstruction can be done.
24 Again, that bullet relates to the Secretary and
25 the way the Secretary must act. We'll talk at

1 the end about my recommendation as to how you
2 should act.

3 And then the third bullet, (reading) The
4 Department of Justice has also indicated that
5 access by claimants or the public at large to
6 classified or restricted information on which
7 HHS may rely in making its feasibility
8 determination is not required by due process
9 considerations.

10 Item: Petitioners have the opportunity for an
11 administrative review within the Department (as
12 provided by the SEC Final Rule).

13 And Item: If the petitioner files a lawsuit
14 and the court concludes it is necessary, the
15 court can review the classified information ex-
16 parte, in camera.

17 So again, you had asked about the due process
18 considerations. Now, again, this isn't new
19 information I'm bringing to you, but this is
20 information that last week I went to the
21 Secretary's representatives and HHS Office of
22 Legal Counsel, and this is the information they
23 asked me to bring to you.

24 The only thing I would add, on the second
25 bullet, it speaks to the Secretary's

1 responsibility. As your Designated Federal
2 Official, I think it is most appropriate that
3 you be mindful of the Secretary's
4 responsibility in your framing of
5 recommendations to the Secretary. I in no way
6 limit your ability to say what you think needs
7 to be said. I do think you need to be mindful
8 of the Secretary's responsibility, again, as
9 you frame recommendations to the Secretary.

10 **DR. ZIEMER:** And let me ask, Board members, do
11 you have any questions for Lew on this issue?
12 Michael.

13 **MR. GIBSON:** If that's the guidance from the
14 Office of Legal Counsel, what's the resistance
15 to putting that in writing so that it can be
16 made public and -- to the Board and to the
17 public so -- in an effort to be transparent?

18 **DR. ZIEMER:** This --

19 **DR. WADE:** I think this --

20 **DR. ZIEMER:** -- this is public.

21 **DR. WADE:** This is public.

22 **MR. GIBSON:** But that's just the HHS opinion of
23 what they --

24 **DR. ZIEMER:** Right.

25 **MR. GIBSON:** -- they determined the Office of

1 Legal Counsel said.

2 **DR. WADE:** Right.

3 **MR. GIBSON:** I'm wondering why the Office of
4 Legal Counsel is resistant to put it in writing
5 for us to look at.

6 **DR. WADE:** Well, I don't think it -- I can't
7 answer that, Mike, though I think the opinion
8 that's relevant is the opinion of the Secretary
9 and the Office of Legal Counsel of HHS, and
10 they're willing to put their recommendation in
11 writing. They based that in part on
12 discussions with the Department of Justice, and
13 they do not have that in writing. I can go
14 back and ask them again to try and get it in
15 writing. It's the wish of the Board with
16 regard to that. They do not have it in writing
17 at this point.

18 My principal concern is the Board be not
19 limited in its ability to do its business, and
20 this is what I wanted to be able to bring to
21 you.

22 **DR. ZIEMER:** Jim Melius.

23 **DR. MELIUS:** Yeah, I mean I would argue that
24 this does limit the Board in its ability to do
25 its work -- essentially disenfranchises us in

1 circumstances where there is classified or
2 restricted information that, you know, many or
3 -- if not all members of the Board would not
4 have -- have access to and would preclude us
5 from essentially evaluating NIOSH's review of
6 the SEC petition. We would not be able to, you
7 know, perform any meaningful review of the --
8 of that -- of that petition. So I would argue
9 that it doesn't nec-- it certainly doesn't
10 facilitate the Board doing anything. In fact,
11 it -- it restricts and, in essence, could
12 disenfranchise us in certain -- certain
13 situations.

14 I'd also remind us that we do have I believe a
15 letter that has never been answered, other than
16 this recent verbal transmission to you, Lew,
17 requesting that written opinion. I mean -- and
18 for reasons that in order to -- for the Board
19 to be able to operate. I think we had good
20 reasons then. I just I believe summarized some
21 of them that I -- trying to remember back
22 there, there could have -- there were more --
23 additional ones, but I don't think it's a very
24 workable approach, given the nature of this
25 program. And particularly it certainly

1 undermines any transparency for this program
2 and any credibility that the Board adds to the
3 recommendations. And are we supposed to just,
4 you know, defer any review of a NIOSH recommen-
5 - recommendation on an SEC simply 'cause we
6 won't be able to technically review it or do an
7 adequate review of it in circumstances -- and
8 those circumstances, do -- what happens, does
9 it just pass through? Do we write a letter
10 saying sorry, we can't do anything?

11 **DR. ZIEMER:** Liz?

12 **MS. HOMOKI-TITUS:** I would just remind the
13 Board that EEOICPA actually gives the
14 Department of Energy authority to provide Q
15 clearances for Board members. So I don't think
16 this limits Board members' access to classified
17 information. This limits public access to
18 classified information.

19 **DR. WADE:** And we do have Board members who
20 have clearances. It could be that you wish to
21 increase the number, and then we could work
22 towards that end. The -- the model we've been
23 working on is that there are Board members with
24 Q clearances that would be privy to this
25 information and then could report in summary to

1 the Board. If you feel there needs to be a
2 greater number of Board members so cleared,
3 then we could pursue that.

4 **DR. MELIUS:** That's certainly one element of
5 it, but it would certainly change how the Board
6 would review and (unintelligible) and I guess,
7 given some of the conflicts of interest, it --
8 it's -- it would require a large number of
9 people. We have some significant problems, for
10 example, on Y-12, by the way, as to who would
11 be -- if anybody would be available to review
12 the -- review classified information. Do that.

13 **DR. WADE:** I understand.

14 **DR. ZIEMER:** We actually have had some
15 difficulty in getting people Q cleared in the
16 past. I know that it's a pretty long, tedious
17 process and -- is there -- is there any -- one
18 of the -- one of the problems is, unless you do
19 it in advance -- if you wait till you have a
20 petition in hand and say we need Q-cleared
21 people, it -- it -- the time factor is very
22 long. How practical is it to think about
23 getting a large number of this Board Q-cleared?

24 **DR. WADE:** We could start now. It's not
25 reasonable to assume that it would be done in

1 any short term.

2 **DR. MELIUS:** And can I also just add that even
3 with Q clearance there's access on like, what,
4 a need-to-know basis and -- and there are still
5 -- information that's still restricted. The Q
6 clearance isn't automatic access to all --

7 **DR. ZIEMER:** Right.

8 **DR. MELIUS:** -- the classified information, and
9 there are situations where, if I recall
10 correctly, that NIOSH staff is not allowed
11 access to the --

12 **MR. ELLIOTT:** No, that's not true.

13 **DR. MELIUS:** -- information.

14 **MR. ELLIOTT:** We -- the need-to-know has been
15 established and it's covered in the memorandum
16 of understanding between HHS and DOE. To date,
17 our experience in getting staff and contractor
18 staff clearances depends on an individual set
19 of circumstances for each case. It runs from
20 nine months to a year.

21 **DR. MELIUS:** Uh-huh.

22 **MR. ELLIOTT:** It can be expedited if you've had
23 a previous clearance and, in some cases, that's
24 still taken six months' time.

25 I'd also note for you, though, that while we

1 have finished dose reconstructions for 12,000
2 claims, not one of those have used classified
3 information to arrive at a dose reconstruction
4 for decision. But this -- this counsel that's
5 been provided would also cover those cases or
6 claims where we might have to use classified
7 information to adjudicate a final decision. So
8 I just want to make that point clear. It's not
9 only SEC petitions that are at risk here, it's
10 also perhaps a claim or two in the future.

11 **DR. MELIUS:** Can I ask a question related to
12 that point? I'm not -- I don't know the answer
13 and it may be something Liz or Larry -- do your
14 procedures currently -- your regulations
15 currently address this -- that part of the
16 issue, the individual claimants' access to this
17 in-- this information? 'Cause if I recall, we
18 set up a process and the law sets up a process,
19 I think presuming that there is -- there is
20 access, and -- and certainly that transparency
21 was an important element of it, and does that
22 require any change in your --

23 **MR. ELLIOTT:** The law does -- the law does
24 speak to the use of classified information.
25 EEOICPA recognizes that there is a need for

1 national security regarding certain types of
2 information, and that we will end up facing
3 that. Our processes, our rules, do not speak
4 to how an individual claimant or a petitioner
5 may be afforded access or may not be afforded
6 access. We have sought guidance and counsel
7 from our own general counsel and from the
8 Department of Labor's general counsel, and the
9 Department of Justice general counsel. We have
10 been told that there are procedures that are
11 employed by the Department of Justice to
12 address how and whether or not access can be
13 given. And you know, I -- to date we've not
14 had to gain experience in any of those
15 procedures so I can't speak to how cumbersome
16 or how difficult or how successful they may in
17 fact be.

18 **DR. MELIUS:** Uh-huh.

19 **DR. WADE:** And just for -- for information on
20 the table, SC&A also has Q-cleared people that
21 are available to the Board.

22 **DR. ZIEMER:** Further comments? Michael.

23 **MR. GIBSON:** Based on this, just to throw this
24 out for a thought for the Board, should we
25 draft a letter to Congress and indicate to them

1 that due to this latest information, it may
2 preclude us from fulfilling our obligations
3 fully?

4 **DR. ZIEMER:** I'm not sure who the question is
5 addressed to, maybe to ourselves. I suspect
6 that if we wanted to raise that issue, we would
7 probably want to do it through the Secretary as
8 a concern, either asking the Secretary to do
9 something on our behalf or take the route of
10 requesting that Board members be granted Q
11 clearance. Lew, do you --

12 **DR. WADE:** No, I agree. I mean I think that's
13 the normal way to proceed. It -- it's really
14 up to you, but...

15 **MR. GIBSON:** Based on the fact we already have
16 the opinion of HHS, could I make a motion that
17 we draft a letter to the members of Congress
18 and inform them that, based on this
19 information, it's -- may preclude us from
20 fulfilling our obligation.

21 **DR. ZIEMER:** Your motion is that we draft a
22 letter to Congress?

23 **MR. GIBSON:** Yes.

24 **DR. ZIEMER:** Okay. Is there a second to the
25 motion?

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(No responses)

Is there a second? No second?

DR. MELIUS: Well, I'm just asking a procedural question 'cause I thought either Lew or Paul indicated it would be a letter --

DR. ZIEMER: Well, I was suggesting that --

DR. MELIUS: -- to the Secretary.

DR. ZIEMER: -- I -- I thought any such letter would go through the Secretary. But that does not bind the Board. If the Board wishes to directly correspond with Congress, I think we can make such an action. We do correspond with Congressional people on a regular basis. It's getting more and more regular, it seems.

DR. WADE: I do think this is an advisory board to the Secretary.

DR. ZIEMER: I'm not hearing a second yet. I'm not sure if that's discomfort with --

DR. MELIUS: It's -- well, personally it's I'm not sure the best way is to go to Congress. I certainly would propose that we communicate with the Secretary -- two-fold, reiterate our request for the written opinion from Department of Justice 'cause I think -- I'd like to understand the rationale and sort of -- better

1 understanding how we may -- how we
2 operationalize this very general sort of
3 statement from -- from them that's, you know --
4 at least how HHS interprets something verbally
5 said by some verbal ruling from the Department
6 of Justice, and I just find it...

7 **DR. ZIEMER:** Let me make a suggestion, just to
8 move us forward on this issue. I'm going to
9 suggest, Michael, that you and Jim get together
10 and draft a proposed motion for the Board for
11 us to act on tomorrow on this issue. I think
12 we understand the intent is to elevate this
13 item and make the consequences known. Perhaps
14 you and Jim could -- is it -- if that's
15 agreeable -- could prepare a written motion for
16 us to act on at our work session tomorrow.
17 Would that be agreeable?

18 **DR. MELIUS:** That'd be fine. And it should --
19 should that motion suggest a letter, we'll
20 draft a letter, also.

21 **DR. ZIEMER:** That would be fine.

22 **DR. MELIUS:** That way I think will
23 facilitate...

24 **DR. ZIEMER:** That would facilitate.

25 **DR. MELIUS:** Okay, good.

1 DR. ZIEMER: Okay, we'll proceed on that basis,
2 then we don't have to wordsmith something right
3 here.

BOARD CORRESPONDENCE RESPONSE TO LETTERS FROM
SEN. CLINTON, SEN. SCHUMER, REP. HIGGINS, REP.
SLAUGHTER, AND MIKE WRIGHT, STEEL WORKERS
(PRESENTATION BY NIOSH/ORAU ON WORKER INTERACTIONS)
DR. PAUL ZIEMER, CHAIR

4 Well, speaking of Congressional correspondence,
5 you have in your notebook several letters. And
6 under the Board rules, the Chair has drafted
7 some responses. I'd like to begin with the
8 letter from Senator Clinton, which -- a letter
9 was dated November 7th dealing with Bethlehem
10 Steel. A proposed response was drafted and
11 distributed to the Board earlier this month by
12 e-mail. Copies of it are on the table. The e-
13 mail transmission dropped the -- big word
14 "draft" should be on this. This is not a final
15 letter, it's a draft. It's not been sent. The
16 draft is dated January 19th. It's in your
17 notebook.

18 This is the proposed response to Senator
19 Clinton's letter. I would like to point out
20 that I also sent a draft of this to Stu
21 Hinnefeld at NIOSH and asked him to provide me
22 with updated figures on the Bethlehem Steel
23 site as far as -- because the draft letter to

1 Senator Clinton used the -- I think it was the
2 November data from the site, so I did ask for
3 that update, and somewhere I have that
4 information. Now it's not in the draft copy
5 that you have. I have a -- it'll just take me
6 a moment here to make files out of it.
7 I'm going to ask for a motion to accept or to
8 transmit my proposed letter, with the following
9 changes. In paragraph two where it says
10 "Department of Labor has referred 678 cases",
11 that number now is 692, from Bethlehem Steel
12 for dose reconstruction. Dose reconstructions
13 have been completed on 578 cases -- and you'll
14 notice that number has dropped from the
15 original value of 580, and that's because a
16 couple of cases apparently got referred back or
17 something like that, so the correct number now
18 is 578, and that is -- instead of 85 percent,
19 it's 83 percent of the total cases, so make
20 that change. The last sentence in that second
21 paragraph should now say three cases have been
22 withdrawn by DOL, leaving 111 cases at NIOSH
23 awaiting dose reconstruction.
24 The next paragraph would say of the 578, 255 --
25 that number remains the same -- appear to have

1 a probability of causation of 50 percent or
2 greater, and 323 will have a probability of
3 causation less than 50 percent. According to
4 Department of Labor, compensation paid to
5 Bethlehem Steel workers as of January 19th,
6 2006 was \$38,250,000, with an additional
7 \$194,139 in medical bills paid.

8 So those are the updated figures, and then the
9 rest of the letter would remain the same. I'd
10 like to ask for a motion to transmit this
11 letter.

12 **DR. WADE:** Just a minute. You are -- we are
13 also in receipt, about the same time frame,
14 from -- letters from Congresswoman Slaughter
15 and Congressman Higgins --

16 **DR. ZIEMER:** Right, and those were --

17 **DR. WADE:** -- and you were --

18 **DR. ZIEMER:** -- those are separate letters,
19 yeah, and we'll handle them individually since
20 the letters are different.

21 **MR. PRESLEY:** I'd make a motion we accept this
22 letter to be sent.

23 **DR. ZIEMER:** Is there a second?

24 **MS. MUNN:** Second.

25 **DR. ZIEMER:** Now I'd call for any modifications

1 that anyone wishes to make or suggest -- Jim.

2 **DR. MELIUS:** Yeah. The draft that's in front
3 of me, it's the last paragraph on the first
4 page, (reading) In light of the actions already
5 taken by the Board...

6 **DR. ZIEMER:** Uh-huh.

7 **DR. MELIUS:** I -- I object to this way this
8 paragraph is written. I understand the
9 rationale, but it seems to me that Senator
10 Clinton's letter makes the assumption that the
11 Board generates a Special Exposure Cohort, and
12 then we sort of say well, we're not planning on
13 doing that. Well, we can't do it. It's not --
14 you know, we act on NIOSH's rec--
15 recommendations. NIOSH either, because they
16 can't complete dose reconstructions in some
17 cases, are forwarding SEC to us, or you know,
18 the more common case so far has been with, you
19 know, petition and people petition us to do
20 that. So I mean I think we need to, you know,
21 address that directly and say it's not -- you
22 know, not our task. We're not in a position to
23 -- you know, we have not been asked to consider
24 an SEC petition there. And I'm a little
25 concerned about -- I think we can say that a

1 number have been done, but we're in this very
2 awkward position. We review individual dose
3 reconstructions. We have I believe reviewed
4 some from Bethlehem. But we may have -- I
5 can't remember if we deferred them or what the
6 action was, but -- but it's only a small
7 number. We have a site profile that we've
8 reviewed and what -- you know, the -- you know,
9 it's still in process. I mean NIOSH is
10 revising the site profile. And there's sort of
11 a lot of -- there's sort of a lot of process,
12 things that have been done but haven't been
13 finalized here. So I think we need to be
14 careful in reaching conclusions about something
15 we're not in a position to reach conclusions
16 about because procedurally we haven't done it.
17 I mean I understand what you're trying to say
18 there.

19 **DR. ZIEMER:** Well, actually I thought I was
20 trying to say just that and perhaps didn't say
21 it well. Number one, the action already taken
22 is referring to the paragraph where we gave an
23 opinion. It's quoted.

24 **DR. MELIUS:** Uh-huh.

25 **DR. ZIEMER:** That's the action, that -- that

1 the site profile is adequate for dose
2 reconstruction. That's a key point, I thought.

3 **DR. MELIUS:** Yeah.

4 **DR. ZIEMER:** Number two, that there is no
5 petition. I mean the last paragraph says there
6 is no qualified petition on which the Board
7 could act. Maybe if you feel that Senator
8 Clinton doesn't understand the process, I'd --
9 we can certainly expand that. I was simply
10 pointing out, in essence, that the Board cannot
11 do anything -- we cannot act, there's -- for
12 SEC, there's no petition before us to act on.

13 **DR. MELIUS:** I would --

14 **DR. ZIEMER:** So help us say it better.

15 **DR. MELIUS:** Yeah, I would bring that to the
16 front of the paragraph 'cause what I'm
17 concerned about, there are no plans by the
18 Board to recommend a special exposure cohort --
19 I mean where we don't plan unless we're asked
20 to review. That -- that -- that's what --

21 **DR. ZIEMER:** I gotcha, okay. So suppose we
22 start the paragraph with -- we drop the word
23 "furthermore" and say "At the present time
24 there's no qualified Bethlehem Steel exposure
25 cohort on which to act."

1 **DR. MELIUS:** Right, yeah.

2 **DR. ZIEMER:** Then what? In light of actions
3 already taken and because the -- and then just
4 drop the thing -- no plans for the Board to
5 recommend -- since we don't do that, that's the
6 point that you are making, I guess.

7 **DR. MELIUS:** Yeah.

8 **MR. ESPINOSA:** Drop that whole sentence?

9 **DR. ZIEMER:** I think the suggestion is that we
10 drop it, starting with -- let's see -- well,
11 I'm not sure -- we can't just drop that phrase,
12 though.

13 **DR. MELIUS:** I think our official position is
14 better said in the paragraph (unintelligible),
15 the one that starts "On January 9th". I mean
16 we've stated that we voted on that and we -- I
17 think we really have sort of formally done what
18 is says here. And because NIOSH --

19 **DR. ZIEMER:** Well, I --

20 **DR. MELIUS:** -- has demonstrated...

21 **DR. ZIEMER:** When the Board instructed me on
22 January 9th, the instruction was to deal with
23 her request for -- that we act on -- or declare
24 an SEC petition, so we do need to say that at
25 the present time there's no qualified --

1 **DR. MELIUS:** Yeah, I think -- I think that --
2 and I would --

3 **DR. ZIEMER:** And then just end at that point.

4 **DR. MELIUS:** I think just end at that point.

5 **DR. ZIEMER:** Is everybody comfortable with
6 that?

7 **MR. GRIFFON:** What -- what's happening with
8 that whole sentence before, in -- "In light
9 of", I think that's --

10 **DR. ZIEMER:** That would disappear.

11 **MR. GRIFFON:** Then I'm -- then I'm satisfied.

12 **DR. ZIEMER:** I certainly consider that
13 friendly. It's within the idea --

14 **DR. MELIUS:** Yeah.

15 **MR. GRIFFON:** Yeah.

16 **DR. ZIEMER:** Wanda, did you have a comment or
17 suggestion? I found no dangling participles.

18 **MS. MUNN:** I'll be cautious about that. Do I
19 understand correctly that you're proposing to
20 eliminate the entire first sentence of the last
21 paragraph?

22 **DR. ZIEMER:** Yeah, it's the second to last
23 paragraph and it would simply say "At the
24 present time there's no --

25 **MS. MUNN:** Yes.

1 Then we have a memo -- let me take the Schumer
2 letter next. This also deals with Bethlehem
3 Steel. Oh, incidentally, this letter would be
4 accompanied by the matrix that I referred to in
5 the letter.

6 **MR. GRIFFON:** Yeah, attached, you said.

7 **DR. ZIEMER:** Yeah, it would be attached. We
8 don't have that here as part of it, but...
9 Now the Schumer letter that's in your file is
10 not the one to which I was responding.

11 **DR. WADE:** There are two.

12 **DR. ZIEMER:** Oh, there's two, okay.

13 **DR. WADE:** And November 14th is the one to
14 which you were responding.

15 **DR. ZIEMER:** November 14th, and then -- I'm
16 looking for my response, here it is.

17 **DR. WADE:** Your response.

18 **DR. ZIEMER:** Okay, here's the response, and
19 there is a similar paragraph in the Schumer
20 letter similar to the Clinton letter that -- in
21 fact, I believe it's identical. But let me ask
22 for a motion to transmit this letter, and then
23 we can take care of it.

24 **MR. PRESLEY:** So moved.

25 **DR. ZIEMER:** Second? Moved by Presley,

1 **DR. WADE:** The second Schumer letter.

2 **DR. ZIEMER:** -- the second Schumer letter,
3 which is dated --

4 **DR. WADE:** Coincidentally, January 19th. This
5 is new to the Board, there's a second Schumer
6 letter dated January 19th that has recently
7 come to Dr. Ziemer. It has an attachment, a
8 two-page document that has Eddie Walker's name
9 at the bottom of it. That should be in your
10 (unintelligible).

11 **MR. PRESLEY:** That's two pages?

12 **DR. WADE:** Right, so you've got this letter
13 from Schumer dated the 19th, and then a two-
14 page one from Eddie Walker that leads with
15 "Dear Mr. Elliott".

16 **DR. ZIEMER:** What is the date of the Ed Walker
17 -- is that the same one we got
18 (unintelligible)?

19 **MS. MUNN:** Yes, I believe it is.

20 **DR. MELIUS:** My recollection is when we
21 considered Bethlehem on the January 9th call
22 that we discussed dealing with Mr. Walker's
23 concerns and that we -- that our action there,
24 in terms of instructions to NIOSH on resolving
25 and changing the site profile, presumed that,

1 should there be further correspondence or
2 issues raised by Mr. Walker, that NIOSH would
3 address those in, you know, an on-- sort of an
4 ongoing manner in terms of, you know, similar
5 they'd addressed to other issues raised for
6 other site profiles, you know, and for
7 claimants and would take those into account in
8 an appropriate fashion. Is that -- am -- I'm --
9 -- probably asking -- I thought that was my
10 recollection 'cause we talked about sort of how
11 to address Mr. Walker's concerns. And not all
12 of them were addressed in -- in our
13 instructions in terms of the site profile and
14 the issues we were trying to resolve. And --
15 and I would suggest that we write back to
16 Senator Schumer something to that effect, that
17 it's our understanding that -- and that NIOSH's
18 actions, you know, in -- revised site profile
19 at some point is going to come back to the
20 Board. NIOSH is going to provide us quarterly
21 reports, et cetera.

22 **MR. ELLIOTT:** That is correct, as I recall, as
23 well. And we have been responding to the
24 numerous letters that Mr. Walker has provided
25 us. This recent letter, we'll again respond to

1 the points that he raises, as we have, and we
2 will post these on our web site, as we do, so -
3 - and we intend fully to bring forward to the
4 Board whatever we resolve in that matrix of I
5 think six or seven items, so...

6 **DR. WADE:** Is Mr. Walker either in the room or
7 on the telephone?

8 **DR. ZIEMER:** He's not in here at the meeting.

9 **DR. WADE:** And he's not on the telephone?
10 Okay, I just want to make...

11 **DR. ZIEMER:** Let me suggest the following since
12 I had not seen the letter -- these letters
13 often, as this one did, don't come to me
14 directly so there's a time lag. I had not seen
15 the letter, but I -- the Board's policy is that
16 -- that letters to Congressional people obtain
17 Board approval. I'm going to suggest that I
18 draft a letter along the lines of what was just
19 described and distribute it to the Board by e-
20 mail and see if there's any major objections
21 with the wording. If there is not, we'll just
22 go ahead and transmit it. If there is, we'll
23 delay sending it. Is that agreeable?

24 **MS. MUNN:** Please do, please.

25 **DR. ZIEMER:** Any objection?

1 (No responses)

2 Without objection, we'll do that.

3 **DR. WADE:** So just so it's understood, the
4 procedure -- Paul will draft a letter, send it
5 to you. If any Board member raises an
6 objection, then we'll hold for the next
7 meeting. If no Board member raises an
8 objection, then Paul will be empowered to send
9 the letter.

10 **DR. ZIEMER:** It'll simply provide a response
11 along the lines of what you described, Jim,
12 that NIOSH is going to bring to us any changes
13 in the site profile.

14 **DR. MELIUS:** Right.

15 **DR. ZIEMER:** He's asking here that we rescind
16 the action we took on January 9th. And unless
17 I hear action to that --

18 **DR. MELIUS:** No, I -- 'cause --

19 **DR. ZIEMER:** -- I'm going to tell him that we
20 are not rescinding that action.

21 **DR. MELIUS:** Yeah. No, I -- and because our
22 action took into account that further
23 information may be raised and --

24 **DR. DEHART:** (Off microphone) I don't
25 understand what his concern was. I guess

1 (unintelligible) we didn't take action.

2 **DR. MELIUS:** And I think --

3 **DR. ZIEMER:** No, we acted on that motion on
4 January 9th, and I can point out to him that
5 that motion did take into consideration the
6 findings of SC&A. He implies here that we
7 should rescind that because of SC&A's findings,
8 and we took those into consideration.

9 **DR. MELIUS:** But our action didn't tell NIOSH
10 not to -- to ignore any further --

11 **DR. ZIEMER:** No.

12 **DR. MELIUS:** -- correspondence or --

13 **DR. ZIEMER:** That's right.

14 **DR. MELIUS:** -- information that came in from
15 Mr. Walker or anybody else, and -- and I think
16 that's -- that's sort of the point. It's not
17 like we've -- that's all that'll ever be
18 considered are those six points, but rather
19 than as new information becomes available it
20 would be incorporated.

21 **DR. DEHART:** That was my recollection.

22 **DR. MELIUS:** Yeah. No, I'm -- 'cause I asked
23 the question specifically. I was trying to
24 understand the -- that, because Mr. Walker with
25 -- some of the information was not sent in a --

1 you know, in a -- at least in a timely way that
2 could be addressed by our resolution process
3 and -- and so forth.

4 **DR. ZIEMER:** Okay. Thank you. Now there was
5 another --

6 **DR. WADE:** Two other Congressional --

7 **DR. ZIEMER:** -- series of letters.

8 **DR. WADE:** These are letters from Congresswoman
9 Slaughter and Congressman Higgins. My
10 recollection was that -- it was a feeling that
11 the Clinton letter would suffice in response,
12 but you need to make that determination.

13 **DR. ZIEMER:** The Louise Slaughter letter --
14 wasn't this a statement to the Board at the
15 time of our meeting, as opposed -- this was not
16 a letter to me. Wasn't this a public statement
17 made by her -- by her staffer?

18 **DR. WADE:** It's possible.

19 **DR. ZIEMER:** My recollection is that this --
20 this Slaughter statement was read into the
21 record already and -- well, it's just part of
22 the deliberations, as was the Higgins -- these
23 are just written copies of what was read into
24 the record, so the Board officially received
25 those. I don't think any action is necessary

1 on those.

2 **DR. WADE:** That's fine.

3 **DR. ZIEMER:** There was one additional letter
4 that asked for certain information, and -- and
5 the Board has been copied on this. I'm -- I
6 don't see it in our booklet --

7 **DR. WADE:** Who was it from, Paul?

8 **DR. ZIEMER:** This was -- this was the --
9 actually we will get to it, it's a Hanford
10 letter.

11 **DR. WADE:** Right, that's --

12 **DR. ZIEMER:** We'll cover that when we get to
13 Hanford.

14 **DR. WADE:** Right.

15 **DR. ZIEMER:** And the information was provided
16 directly I think, Lew, by you or by NIOSH and
17 we'll cover that at the appropriate time.

18 **DR. WADE:** Right.

19 **DR. ZIEMER:** Okay.

20 **DR. WADE:** The only other longstanding letter
21 we have is a letter from Mike Wright with the
22 steelworkers. We've arranged for ORAU to brief
23 the Board on its efforts with regard to
24 collecting and taking into account worker
25 information. We could have that briefing now

1 or we could have it after lunch, as you
2 would...

3 **DR. ZIEMER:** How long does that briefing take?

4 **MS. KIMPAN:** I intend to be very brief,
5 depending on the questions and comments the
6 folks may have.

7 **DR. ZIEMER:** Why don't we go ahead and do it,
8 we have about 15 minutes, don't we? Yes, let's
9 proceed.

10 **DR. WADE:** Right, the only thing I would ask --
11 please, proceed, come to the microphone. I'd
12 like to hold to the 1:30 time slot for the
13 beginning of the Rocky Flats discussions again
14 'cause we'll have folks from Colorado on the
15 phone, but I think we're -- that's well within
16 our -- our ability to do.

17 **DR. ZIEMER:** Okay, so we'll proceed with this -
18 -

19 **MS. KIMPAN:** (Unintelligible) Hello, thank you
20 Dr. Ziemer, Dr. Wade, members of the Board.
21 I'm Kate Kimpan, the project director for the
22 ORAU team for this effort. It's a pleasure to
23 be here today and share with you some of what
24 we're doing in both response to Mr. Wright's
25 letter to the Board and others last June, but

1 also in response to the growing need that we as
2 a team have felt and that our colleagues at
3 NIOSH have felt and instructed us to deal with.
4 And that is we, as a part of this entire
5 process, get a great deal of input from a
6 number of interested parties around the
7 country. In particular we conduct worker
8 outreach meetings where we try to assure that
9 workers who are represented have
10 representatives there to share with us
11 important information that they may have.
12 In Mr. Wright's letter in June he raises
13 concerns about how we're dealing with the
14 information that we gather, what we've done
15 with it, and what our response is. And I
16 wanted to start by saying I know you're
17 familiar with some of the activities that have
18 gone on, but our team has developed, working
19 closely with OCAS, a database to capture these
20 comments. The name of that database, in our
21 world of acronyms, is the WISPR database, which
22 is the Worker Input to Site Profile Revisions.
23 This database has the capacity both to capture
24 comments that were made, but as importantly,
25 after those comments are captured, to assure

1 that the commenter and public understand what
2 our team's response was to those comments.
3 I will say that in everything that we've done
4 up until now -- I've been on board since
5 November, so when I say everything, it might be
6 a more limited everything. In the work that
7 was done prior to that, and we're continuing,
8 we at these meetings, where we're there
9 intentionally to gather input from workers,
10 always have the team leader for the site
11 profile document there. There's also always a
12 representative from NIOSH in the room. So I --
13 I want to assure you that every comment that we
14 get is extremely important. But I don't want
15 you to think that we go into these meetings and
16 might walk away with some extremely important
17 comment with a delayed action upon it. We're
18 endeavoring to make very clear to folks that
19 have commented what we've done. And in several
20 instances, about a dozen or so, we have
21 communicated back with the representatives of
22 organized labor that were as part of the
23 meeting to assure them that they know what --
24 how their input is valued and what it's done.
25 You've heard many, many discussions through the

1 many meetings as to the different processes and
2 procedures that have emerged. And those of you
3 that have been watching this closely realize
4 many of the things that we're doing, including
5 everything from revisions in documents to
6 development of the database to revisions in the
7 conflict of interest policy, are issues that
8 were first raised in these arenas. So I think
9 our project's responsiveness to this comment --
10 these -- these comments and concerns has been
11 empirical and it's been boisterous. A place
12 where we have absolute room to improve is to
13 coordinate how we assure that folks that have
14 made comments in these meetings, folks who did
15 not wish to remain anonymous, understand what
16 we've done in response to those comments.
17 We have a procedure developed now that's --
18 it's -- it's one of the ORAU procedures that
19 oversee how we deal with these comments. We're
20 endeavoring to comply immediately with those
21 procedures. We've right now entered into our
22 database, which has the capacity, as I said, to
23 both have the comment and to have our response
24 to it showing, the comments from -- more than
25 600 comments from eight of the largest meetings

1 at the largest facilities. As I say, we're
2 going to -- we intend to work very closely with
3 OCAS in coming days and weeks as we continue to
4 ramp this up to assure that the concerns that
5 Mr. Wright outlines and that others may have --
6 are you hearing us; when you hear us, what do
7 you do with it -- we need to assure people that
8 yes, we're hearing you. We're listening. We
9 have found interesting and essential
10 information. You hear them in these meetings,
11 people will identify records, identify
12 processes that only those -- those folks who
13 were in those facilities really know, so
14 they're incredibly valuable. And a place where
15 I think we have great room to improve is to
16 assure that workers, their families and their
17 representatives understand what that value is.
18 More importantly, empirically understand how
19 we've dealt with each one of the comments. If
20 it's a comment that's important and already
21 assimilated, it doesn't mean we shouldn't
22 respond; it means we need to let those folks
23 know thank you for your comment, here's what
24 our action is and response.
25 It's not thoroughly developed exactly how we'll

1 communicate with everyone because these arenas
2 are quite broad. Obviously if it's a group of
3 steelworkers that were part of the meeting,
4 communicating back with that local is a very
5 effective way to assure that folks know what's
6 occurred. If it's an area of workers that were
7 represented by others, or not represented at
8 all, it creates more challenges for us, and
9 we're endeavoring to determine what the best
10 way is to assure people that they're being
11 heard.

12 Putting things on the web is a great way for
13 some. I've heard concerns in my -- my sidebars
14 through this meeting that of course there are
15 many, many of these workers who might come make
16 a comment that aren't likely to be able to look
17 on the internet for the response. So we're
18 going to work closely with OCAS to determine
19 how best to assure that the word is getting out
20 to the people in a productive way so they
21 understand how essential their input and
22 contribution to these documents and programs
23 are. As you know, all the many, many, many
24 documents that we've worked through this system
25 thus far, none of them would have made it to

1 where they are without the essential input from
2 those folks who are working in those
3 facilities, alerted us to processes, problems,
4 records and occurrences. It's an absolutely
5 inherent part of us doing our job well. We
6 have room to improve on assuring that workers
7 and their representatives and their families
8 understand that we're hearing them and what
9 they're doing, and I'd welcome any questions or
10 comments or suggestions that you all have to
11 assure we're doing this well.

12 **DR. ZIEMER:** Kate, could you identify for the
13 record -- if you have it at your fingertips --

14 **MS. KIMPAN:** Yes.

15 **DR. ZIEMER:** -- the ORAU procedure number --

16 **MS. KIMPAN:** I do, and it's ORAU Procedure
17 0097, Revision 00. It's titled "Conduct of the
18 Worker Outreach Program", and it was approved
19 on December 29th of this past year.

20 **DR. ZIEMER:** Thank you. And I want to
21 determine or ask John Mauro, do you know, John,
22 if that procedure's on our list -- updated list
23 of procedures to review?

24 **DR. MAURO:** I do not --

25 **DR. ZIEMER:** It may be too new to -- but we --

1 **DR. MAURO:** -- (unintelligible).

2 **DR. ZIEMER:** -- want to make sure --

3 **DR. MAURO:** (Off microphone) (Unintelligible)
4 list that.

5 **MS. KIMPAN:** Does yours -- pardon me. Dr.
6 Ziemer, does your list include Procedure 0031,
7 Technical Basis Document Development Review and
8 Approval, which was also updated
9 (unintelligible) --

10 **DR. ZIEMER:** Kathy has the list here and just
11 is checking it. We don't need to know that
12 right now. I'm basically saying we want to
13 make sure that -- that we have a look at what's
14 being done.

15 The other question I'm going to ask -- you
16 know, when we have our public comment periods
17 here, and all of that information is captured
18 of course in the transcripts, we have always
19 sort of assumed that the appropriate people
20 will pick up the information. If it's a
21 Department of Labor issue, that their reps will
22 follow it. If it's a NIOSH issue, that NIOSH
23 will follow it and so on. But I'm wondering if
24 anyone has thought about capturing -- do you
25 folks capture the appropriate remarks from our

1 transcripts to enter into the comment database?

2 **MS. KIMPAN:** The reason I looked at Larry is
3 there was much that had gone before. I -- I
4 have to say I don't know whether there's a
5 formal review of transcripts. I know that
6 after each meeting the government
7 representatives and the ORAU team
8 representatives certainly, with their own notes
9 and experiences, when something emerges here
10 you sort of see us all huddle, so there's an
11 immediate exchange of information.

12 **DR. ZIEMER:** Right, right, I'm sort of getting
13 at -- and the Board doesn't really have a -- in
14 place a formal procedure to track what occurs,
15 but we are aware that there's a wealth of
16 information --

17 **MS. KIMPAN:** Absolutely.

18 **DR. ZIEMER:** -- that also emerges from the
19 public comment periods, and we don't want to
20 lose that. So that perhaps we can -- if the
21 Board agrees with this, would -- and if NIOSH
22 doesn't object, to at least have some means of
23 sort of checking that --

24 **MS. KIMPAN:** Absolutely.

25 **DR. ZIEMER:** -- maybe looking at the

1 transcripts and make sure that the appropriate
2 items have been captured, if -- if needed.

3 **MS. KIMPAN:** Absolutely, and I believe --
4 absolutely.

5 **MR. ELLIOTT:** Yeah, you caught me --

6 **MS. KIMPAN:** Sorry.

7 **MR. ELLIOTT:** -- not sleeping, but thinking
8 about something else, so -- but yes, I think
9 before Kate's arrival -- you know, Dr. Toohy
10 always attended these meetings or had some
11 other ORAU person attend. There were folks at
12 ORAU who perused the transcripts and captured
13 in what was called a Top Hat database, which
14 was an ATSDR software package that was totally
15 unusable by everybody else in the world and we
16 couldn't give SC&A access to it, actually. We
17 got that converted over now to this WISPR
18 database, and I think -- I think there's still
19 resident now in that, there's still some
20 comments that were collected --

21 **DR. ZIEMER:** Good.

22 **MR. ELLIOTT:** -- from Board meetings through
23 the transcript mechanism.
24 I would just offer this, that -- you know, you
25 saw me jump up a couple of times last night --

1 **DR. ZIEMER:** Sure.

2 **MR. ELLIOTT:** -- and I pull people out in the
3 hallway and we talk to them and we try to get
4 down to the bottom of the facts --

5 **DR. ZIEMER:** And we know that there's follow-up
6 occurring. I'm really asking about -- 'cause
7 you're really formalizing the process so
8 something doesn't fall through the cracks.

9 **MR. ELLIOTT:** Right, and we want to make sure
10 that where there is essential information
11 that's relevant to doing dose reconstructions,
12 that has impact on dose reconstructions, we
13 capture that --

14 **DR. ZIEMER:** Right.

15 **MR. ELLIOTT:** -- and we -- we tell people how
16 we're utilizing that information. But at the
17 same time I'll say this to you, Paul, that a
18 lot of what we hear, in the end is not truly
19 relevant --

20 **DR. ZIEMER:** Sure.

21 **MR. ELLIOTT:** -- and needs to be couched in a
22 site profile. It may be couched elsewhere in a
23 Technical Basis Document, it may be couched
24 elsewhere in a Technical Information Bulletin,
25 and we're -- and Kate's rightfully commented on

1 where we stand to make some very I think
2 considerable improvement is in those areas
3 where things that we hear that we don't -- you
4 know, we just don't believe they're going to,
5 you know, make any difference at the end of the
6 day, we need to get back to those people and
7 explain why.

8 **DR. ZIEMER:** Yeah. Yeah. So --

9 **MR. GRIFFON:** Can I just ask a follow-up on --

10 **DR. ZIEMER:** Sure.

11 **MR. GRIFFON:** -- that? In the WISPR database,
12 do we have access to that? I haven't seen it.
13 I just don't know if SC&A has --

14 **MR. ELLIOTT:** I don't think you do yet, but I
15 think the plans -- that work is underway to
16 give you access, to give SC&A access. I don't
17 think they've actually got into it yet, but
18 that's --

19 **MS. KIMPAN:** (Off microphone) (Unintelligible)
20 --

21 **MR. ELLIOTT:** -- our intent.

22 **MS. KIMPAN:** -- (unintelligible) --

23 **MR. GRIFFON:** Does that include --

24 **MS. KIMPAN:** -- (unintelligible) --

25 **MR. GRIFFON:** -- you mentioned in your

1 presentation 600 comments or so --

2 **MS. KIMPAN:** Yes.

3 **MR. GRIFFON:** -- from these worker outreach --

4 **MS. KIMPAN:** Yes.

5 **MR. GRIFFON:** -- meetings, so those are rolled
6 into the same database?

7 **MS. KIMPAN:** They are.

8 **MR. GRIFFON:** Okay.

9 **MR. ELLIOTT:** And maybe to -- maybe to help
10 Kate out a little bit, you know, comments come
11 in a variety of mechanisms. Some comments are
12 -- we prefer written comments. And our policy
13 is written comments are replied to in writing,
14 and so that -- you know, if a person goes to
15 the trouble to put pen to paper, we feel that
16 we owe them the courtesy of responding in
17 writing, as well. And that's -- that's pretty
18 well established.

19 We get comments in worker outreach meetings
20 that are verbal. We capture those in the
21 minutes. The minutes do go up on our web site.
22 What we need to do a better job of, as we noted
23 here before, is getting back to those folks and
24 letting them know hey, here's how we treated
25 it. You may not have seen it, you know, on the

1 web site or you may not know that it got caught
2 in this information bulletin, or you know, we
3 appreciate your thoughts and your comments, but
4 you know, for dose reconstruction purposes, you
5 know, there's no real relevance there and this
6 is why.

7 We get comments of course from this Board
8 meeting. We also get comments as we travel
9 around in town hall meetings that are separate
10 from the outreach effort. A year -- two
11 summers ago we put on workshops for dose
12 reconstruction and how we go about doing that,
13 and we had -- and we invited union stewards,
14 safety reps from organized labor, advocates for
15 groups of people at different sites where there
16 wasn't organized labor existing. We pulled
17 those people in. We're going to do that again
18 this summer, as well. I just want to get that
19 on the record and so that we can, you know,
20 have people start thinking about if they want -
21 - they have an interest in attending those
22 workshops. That's another source we get input.

23 **MR. GRIFFON:** Can I just --

24 **DR. ZIEMER:** Good. Thank you. Mark.

25 **MR. GRIFFON:** -- have a question on the WISPR

1 database, is it -- does that have comment and
2 resolution?

3 **MS. KIMPAN:** It does.

4 **MR. GRIFFON:** (Off microphone) I think that
5 would be important (unintelligible).

6 **MS. KIMPAN:** (Off microphone) It has what's
7 (unintelligible) --

8 **DR. ZIEMER:** So you're really tracking each
9 item --

10 **MS. KIMPAN:** It does, and that was part of --
11 the other limit on Top Hat was it was a capture
12 without, you know, the live part of what did
13 you do. You need to know that every one of
14 those comments has been in my shop triaged to
15 the proper manager for resolution. So we're
16 dealing very promptly, and our policy has been
17 -- although, as Larry points out, we have room
18 to improve how people understand that -- always
19 has been immediately following those meetings --
20 - after the minutes are approved, because the
21 minutes must be approved by the participants --
22 those meetings are thoroughly -- those -- those
23 minutes are thoroughly scoured, the issues are
24 pulled out and given to the proper manager and
25 the responses come back. And you see the

1 response emerging in -- in, you know, things as
2 broad as some of the -- the way that we're
3 doing our overall work, but we didn't say to
4 that commenter you're why we developed a
5 coworker ritual. But it's because of what
6 we've learned at these meetings, as you know,
7 that many of our OTIBs and many of the other
8 procedures and processes are put in place,
9 because of what we've learned. This database
10 does allow for resolution. And as a matter of
11 fact, it's essential that you have a resolution
12 before you can close out an item.

13 **DR. ZIEMER:** Uh-huh.

14 **DR. WADE:** Just to collect some items from the
15 long discussion we've just had, I'll take it
16 upon myself to see that the SC&A task to review
17 procedures is modified to include 0097 Rev. 00.

18 **MS. KIMPAN:** And Dr. Wade, also would you add
19 to that the Revised Proc. 0031, which is the
20 Technical Basis Development document, which has
21 been revised to accommodate these other
22 changes? It's part of our formal TBD process
23 now.

24 **DR. WADE:** I'll do that. I'll ask that every
25 effort is made to make the WISPR database

1 available to the Board and SC&A and that we e-
2 mail the Board when that availability has been
3 granted. And then I would ask that -- that the
4 minutes (sic) from these meetings, starting
5 with this meeting, be reviewed thoroughly and,
6 as appropriate, entry into the WISPR database
7 be made of comments that are taken here.

8 **MS. KIMPAN:** Absolutely.

9 **MR. GRIFFON:** I would -- I would also say it
10 might be useful, after we get the WISPR
11 database, to have another forum where we can
12 talk to the worker outreach (unintelligible) --

13 **MS. KIMPAN:** Absolutely, we welcome input on
14 how to --

15 **MR. GRIFFON:** -- (unintelligible) it would be
16 useful to look through comments and resolution
17 first before we pursue any (unintelligible).

18 **MS. KIMPAN:** Absolutely.

19 **DR. ZIEMER:** Dr. Melius.

20 **DR. MELIUS:** I have two questions. The first
21 is that I believe a union representative last
22 night had pointed out that he had submitted
23 comments on one of the site profiles -- I
24 believe he said two years ago, but maybe I
25 picked up the dates wrong -- and he knew that

1 they had been received, but there had been no
2 response to that. And -- and --

3 **MS. KIMPAN:** I might have been in a sidebar, do
4 you -- who -- who was --

5 **DR. MELIUS:** It was a public (unintelligible) -
6 -

7 **MS. KIMPAN:** No, no, I mean who was that?

8 **DR. ZIEMER:** Yes, in fact, I asked him if he
9 could confirm that he had transmitted the
10 information, and he said he had confirmation of
11 delivery or something.

12 **DR. MELIUS:** And I just was curious about a
13 response to that.

14 **MR. ELLIOTT:** It was Mr. Glenn Bell, and yes,
15 we did receive the information. And I -- I
16 don't know if Bill Tankersley can help me out
17 here, but what he submitted to us were maps of
18 the site and other information. And
19 rightfully, ORAU takes information that's given
20 to it and makes sure it goes through a
21 classification officer because some of this
22 information, while it may be so marked as non-
23 confidential, before we put it up on our web
24 site, we need to make sure that we're not going
25 to put something up that's (unintelligible) --

1 **DR. ZIEMER:** Well, especially site plans
2 nowadays are very --

3 **MR. ELLIOTT:** And I believe that's where it's
4 at --

5 **DR. ZIEMER:** -- a concern.

6 **MR. ELLIOTT:** -- it's still being --
7 classification review, I think.

8 **UNIDENTIFIED:** (Off microphone)
9 (Unintelligible) specifically about those
10 documents (unintelligible).

11 **MR. ELLIOTT:** And I hope I'm not stepping out
12 of bounds here, but I think the reason why is
13 there's some building names and numbers on
14 there and we have to be careful about that.

15 **DR. ZIEMER:** Yeah.

16 **DR. MELIUS:** Okay, but I guess one of -- my
17 point is -- one, is that -- first of all, this
18 has taken I believe two years, if we've --

19 **MR. ELLIOTT:** I've talked to him. I've talked
20 to him and I've sent e-mails back to him --

21 **DR. MELIUS:** Okay, okay, that --

22 **MR. ELLIOTT:** -- so you know, it's -- I think
23 he's frustrated in the fact that we can't seem
24 to shake it loose.

25 **DR. MELIUS:** Okay. But I mean I think it also

1 addresses our earlier issue about classified
2 information, so I mean this -- see it in
3 another example, one of the frustrations
4 involved and -- and potential problems in
5 dealing with that and it's not always
6 straightforward.

7 My second question is that in terms of
8 scheduling these meetings and so forth, is it a
9 policy that when there's any significant
10 revision to a site profile that there is a
11 meeting held to get input and, you know, review
12 of that significant revision with the people at
13 the site? I mean...

14 **MS. KIMPAN:** It certainly has been the case
15 that at sites where we get a great deal of
16 comment there's a great deal of revision. We
17 often have visited that site multiple times. I
18 apologize, I don't know if -- if there's a
19 formal proc-- I think there is not a formal
20 procedure that says if there's any change, we
21 will conduct another meeting. At the time, as
22 you know, that the outreach meetings were
23 growing in the form that they were in, it was a
24 -- it was a slightly less broad agenda. Now
25 obviously we're very interested in input for

1 everything from dose reconstructions -- well
2 beyond just those documents, so I don't think
3 we always conduct another meeting after there's
4 been a change.

5 We do communicate in writing, and I have 30, 40
6 examples in my packet, with the representatives
7 of organized labor. For instance, the
8 steelworker meetings, we always send things
9 back to those locals when there's been a change
10 because of their comments.

11 **DR. MELIUS:** I mean I -- 'cause I would suggest
12 that that become part of your policy/procedure,
13 do that. Now again, if there's a revision
14 underway and you're -- you address that at a
15 meeting, that's -- another meeting, that's
16 fine.

17 **MS. KIMPAN:** Sure.

18 **DR. MELIUS:** I don't think it has to be done
19 necessarily twice or whatever. But -- but
20 certainly as part of that process at some
21 point, what one -- I -- I think that would be
22 good because -- I mean, you know, this has been
23 late in coming about. It's taken a lot of
24 effort and a lot of urging on the part of the
25 Board to get this process in place.

1 Secondly, there's an awful lot of frustration
2 out there because these site profiles have been
3 in place. They're being used for literally
4 thousands of dose reconstructions without an
5 opportunity for meaningful input until
6 relatively recently. And I think the more that
7 the -- well, you may disagree with me, Larry,
8 but that's the -- certainly the -- my feeling
9 and the belief of a lot of other people out at
10 the -- at these sites, and -- and a sense that
11 you don't take people's comments into account,
12 or to a very small extent. And I think to
13 address that I think you really need to beef up
14 and formalize the process for when you will do
15 that so at least people will have reassurances
16 that significant changes will not be made
17 without the opportunity for input.

18 **MR. ELLIOTT:** Let me just say that -- I'm
19 sorry. Yes, we do go back and we attend to any
20 requests for a revisit, and we've documented
21 that effort. And again, this is what we've
22 been saying all along here. We do have room
23 for improvement on getting back to folks and
24 telling them where their comments stand.

25 **MS. KIMPAN:** And Dr. Melius, I assure you those

1 comments are taken extremely seriously. I
2 think we have absolute room to improve on how
3 we assure people that's the case. But I want
4 you to know that, as science teams, both OCAS
5 and ORAU take extremely seriously these
6 comments. And I really do have a lengthy list,
7 although we're short on time, of the many,
8 many, many changes in our actual operations for
9 those thousands of dose reconstructions that
10 have been in response -- direct response to
11 these comments. The fact that you bring up
12 that you don't -- you weren't aware of that,
13 and importantly, the folks making the comments
14 might not be, shows us where we have vast room
15 for improvement. But I assure you we're taking
16 those comments extremely seriously as a
17 program. And if someone raises an issue at
18 those meetings that has immediate impact, both
19 OCAS and the team leader are in that room in
20 real time, and they don't wait until something
21 else to incorporate that important information.
22 And it's why you see things like some of the
23 TIBs that we've developed, some of the OTIBs
24 and some of the other processes that we've
25 developed are in direct response to this input

1 that we've received.

2 **DR. ZIEMER:** Thank you. Mark has a comment.

3 **MR. GRIFFON:** Just a follow-up to what you just
4 said. You said you had a list of these -- and
5 even if it's in draft form, I think that'd be
6 useful, and if you have a pri-- if you can get
7 a print-out of it for the Board --

8 **MS. KIMPAN:** Of?

9 **MR. GRIFFON:** -- and for the public. You just
10 said you had a list of examples of where you
11 had comments that -- that resulted in changes.

12 **MS. KIMPAN:** I -- I do indeed have a list, but
13 it's sort of my scrawled, bulleted what-we've-
14 dones.

15 **MR. GRIFFON:** Oh, it's not --

16 **MS. KIMPAN:** I'd be glad to formalize a --

17 **MR. GRIFFON:** I think maybe --

18 **MS. KIMPAN:** Yes, absolutely --

19 **DR. ZIEMER:** Maybe in the future that would be
20 something to share, yeah.

21 **MS. KIMPAN:** Absolutely.

22 **DR. ZIEMER:** Thank you.

23 **MR. GRIFFON:** Especially if we're still going
24 to be waiting for the WISPR database. I mean I
25 think that will all be in the WISPR database,

1 so if we have access to that, that might...

2 **MS. KIMPAN:** Yeah, WISPR went into production -
3 - full production on the 15th of January, so
4 it's relatively recent, and I know we're
5 endeavoring to ensure that y'all have access.

6 **DR. ZIEMER:** Okay. Kate, thank you very much
7 for that presentation, and we're encouraged by
8 the direction that things are going with the
9 new database, and we'll look forward to updates
10 as we proceed. Thank you.

11 **MS. KIMPAN:** Thank you very much.

12 **DR. ZIEMER:** We're going to break for lunch.
13 We need to be back promptly at 1:30 to discuss
14 the Rocky Flats site profile.

15 (Whereupon, a recess was taken from 12:10 p.m.
16 to 1:35 p.m.)

17 **DR. ZIEMER:** I'd like to call the meeting back
18 to order, please.

19 Before we begin our regular agenda items, I
20 just want to mention to the Board and to those
21 assembled here, relative to the United
22 Steelworkers letter that was being discussed in
23 terms of the capturing of information from
24 workers and so on that we discussed just before
25 the break, I will send a formal reply to that

1 letter. When we originally got it last summer,
2 it didn't appear that it needed a reply, it was
3 simply some information. And it closed with
4 please contact us if you have questions, was
5 the way it ended. But I will reply to it and
6 summarize what is being done in a formal way by
7 the contractor to track the comments of workers
8 and then follow up on them, so I just wanted to
9 let you know that I will reply to that letter,
10 which is the Michael Wright letter.

**ROCKY FLATS SITE PROFILE - DISCUSSION/
PLAN OF ACTION**
DR. PAUL ZIEMER, CHAIR

11 Now we're ready to begin our discussion of the
12 Rocky Flats site profile. I want to find out
13 whether anyone from the Rocky Flats or from --
14 from the site is -- is on the telephone line.
15 Do we have anyone remote from -- from Colorado?

16 **MR. DEMAIORI:** Tony DeMaiori with the United
17 Steelworkers.

18 **DR. ZIEMER:** Thank you. Let me ask you to
19 repeat the name for our court reporter again.

20 **MR. DEMAIORI:** Tony DeMaiori.

21 **DR. ZIEMER:** You may want to spell that for
22 him.

23 **MR. DEMAIORI:** D-e-Capital M-a-i-o-r-i.

24 **DR. ZIEMER:** Thank you very much. Is there

1 anyone else from your group there?

2 **MR. HILLER:** We also have staff of the Colorado
3 Congressional delegation. I'm David Hiller
4 from Senator Salazar's office.

5 **DR. ZIEMER:** Thank you. Anyone else?

6 **MS. ALBERG:** Jeanette Alberg with Senator
7 Allard's office.

8 **DR. ZIEMER:** Welcome.

9 **MS. BOLLER:** Carolyn Boller from Congressman
10 Udall's office.

11 **DR. ZIEMER:** Thank you.

12 **MS. WARDER:** Amy Warder with Congressman
13 Beauprez.

14 **DR. ZIEMER:** Very good, thank you very much.

15 **DR. WADE:** Now we will be discussing a matrix.
16 Do you have copies of the matrix?

17 **UNIDENTIFIED:** Yes.

18 **DR. WADE:** And please, if there's any -- if you
19 have any questions in terms of your ability to
20 hear, please raise them. We want you to be
21 able to participate as fully as possible.

22 **DR. ZIEMER:** Now our -- our session this
23 afternoon, for the Board members here, will be
24 somewhat redundant in that for some of the
25 Board members we had a presentation yesterday

1 dealing with Rocky Flats that was made to our
2 subcommittee. And the Board's contractor,
3 SC&A, which has done the site profile review
4 and represented here by Joe Fitzgerald, did
5 present some material to the Board yesterday,
6 and we've asked Joe to basically present that
7 same material, both to the full Board today and
8 to those of you who are there by telephone. So
9 I'm going to turn the mike over to Joe
10 Fitzgerald, who is with SC&A, and he's going to
11 review for us the materials from our contractor
12 on the Rocky Flats plant and the issues that
13 were raised on the site profile review. Joe
14 Fitzgerald.

15 **MR. FITZGERALD:** Thank you, Dr. Ziemer. This
16 is Joe Fitzgerald. I led the Rocky Flats site
17 profile review on behalf of SC&A, and good
18 morning out in Colorado, good afternoon here.
19 First off I just want to clarify one thing.
20 Certainly we prepared the detailed matrix that
21 you're looking at at this point. My
22 presentation is essentially highlights of that
23 matrix, focusing on issues that are significant
24 from a dose reconstruction standpoint, or
25 issues that would be perhaps challenges or

1 barriers to doing dose reconstruction. So
2 again, we certainly did touch on, in the
3 working group, all of the issues you're looking
4 at. I believe there's 21 findings that were
5 cited in the matrix. NIOSH in fact will
6 mention it later. They have prepared a initial
7 preliminary response to those specific issues
8 and so certainly there's been a exchange on
9 each and every item there, although we haven't
10 had a chance to have a interchange discussion
11 in a working group atmosphere. So this is,
12 again, going to highlight what we think are the
13 more significant issues that would be
14 particularly important at this point in the
15 process.

16 I don't believe you have a copy of my
17 presentation, so I'm going to also cover these
18 -- these slides I'm presenting here on the
19 screen and more or less repeat them for your
20 sake, as well.

21 The Rocky Flats profile was conducted in the
22 fall of last year, beginning actually in early
23 August and -- with a report being submitted
24 after classification review on December 8th.
25 The Rocky Flats matrix, which you do have, is

1 actually the prototype issue resolution matrix
2 that we're using for the site profiles, and it
3 basically highlights the findings that we're
4 looking to have a further interchange with
5 NIOSH on and -- and looking to resolve the
6 questions, both technical and factual, as well
7 as those that pertain to dose reconstruction.
8 And that matrix itself was submitted on
9 December 15th, so that's a relatively recent
10 review.

11 The first primary issue I want to touch on is
12 the use of urine bioassay MDA median values,
13 which may not be appropriate for plutonium and
14 americium. And the issue there is very -- very
15 much the -- given the rather primitive internal
16 bioassay techniques in the '50s and even into
17 the early '60s, our concern on the site profile
18 is that the -- the use of the median MDA values
19 for plutonium and americium, and even for
20 uranium but to a much lesser extent, we feel
21 were unduly low, given the -- given the
22 variables involved. And the variables
23 themselves include the counting time, the
24 theoretical upper bound detector counter
25 efficiency, and a number of other parameters

1 which are cited in the report. But all of
2 these contribute to what we think is a level of
3 uncertainty that belies the estimation or the
4 assumptions that are provided in the TBD at
5 this point. And I think, again, it's a
6 question of how much conservatism is really
7 required to be claimant-favorable, particularly
8 in that particular era of the 1950s.
9 So what we would like to see certainly is --
10 and I believe this is what we heard yesterday -
11 - is NIOSH perhaps revisit those parameters,
12 look at some of the issues that we felt were
13 questionable, were ones that perhaps could be
14 tightened up, and to come together in terms of
15 what would be perhaps more appropriately
16 conservative MDAs.
17 And the implications of that particular issue,
18 I think, are important from the standpoint
19 that, you know, as you look at the history of -
20 - of how doses were recorded -- internal doses
21 were recorded at Rocky Flats, you know,
22 certainly the workers on the other end of the
23 phone can attest that in the earlier days yeah,
24 that there were certainly practices where --
25 and policies where doses would be assigned. In

1 this case certainly we understand that
2 urinalysis (unintelligible) less than ten
3 percent of the tolerance level, and the
4 tolerance level were the -- the maximum
5 allowable concentrations in urine -- activities
6 in urine that would be permissible for workers
7 at the site, and anything less than ten percent
8 of those values would be recorded as background
9 or zero. And that would present a -- certainly
10 an issue if in fact the MDA values that you're
11 using are lower potentially than those values.
12 So we're looking at some of the implications of
13 -- of perhaps assigning overly-low MDA values
14 as being ones where you will miss dose. And
15 we're concerned that at least the -- there's a
16 need to look at that particular issue.
17 Now in the report, as well as in the matrix, we
18 offered forward an approach to how one could go
19 about perhaps injecting more conservatism on
20 these parameters. And I think the suggestion
21 was taking two of the four parameters and using
22 the more extreme values to come up with these
23 higher MDA values. I think that was only
24 offered as a -- one possible pathway. For the
25 benefit of the folks on the other end of the

1 phone, certainly NIOSH identified another way
2 to go about looking at the conservatism and the
3 precision of these assumptions and coming up
4 with another analysis that would give you a MDA
5 value based on these more conservative
6 assumptions. Certainly we're ready to talk
7 about that and look at that.

8 I might stop for a moment. If there's any
9 questions -- we, again, had gone through this
10 yesterday so I think to some extent we had
11 covered a number of these issues. If there's
12 any questions on any of these issues -- I don't
13 think you have the benefit of any of these
14 presentation slides, either.

15 (No responses)

16 No questions, okay.

17 **UNIDENTIFIED:** (Off microphone)

18 (Unintelligible) we have the --

19 **MR. FITZGERALD:** I'm talking to the folks on
20 the other end of the phone.

21 Okay, if I can turn to another issue that
22 you'll see in your matrix chart, we're
23 certainly looking at the TBD from the
24 standpoint of -- of how high-fired -- which is
25 the colloquial term for the lower, insoluble

1 plutonium compounds were addressed. And our
2 concern there, and I think we've gone through a
3 fair amount of analysis in the report -- you
4 know, again, were the relatively high MDA
5 values that exist in the 1950s and '60s and
6 certainly the -- in the .01 becquerel range --
7 relatively high MDA value, and something that
8 wasn't improved upon until into the mid-'60s.
9 The low fraction of activity intake excreted
10 through the urine was another limitation, and
11 certainly the historic delay in or lack of
12 post-incident urinalysis or fecal analysis were
13 all situations where if in fact lower or
14 insoluble, or the super S, plutonium was
15 involved, certainly you would be concerned
16 about perhaps missing a dose from that
17 standpoint.

18 So, again, our interests or our concern on that
19 particular issue is two-fold. One, the
20 question of acute intakes of such compounds;
21 and two, whether or not in fact in certain
22 target organs like the GI tract this might be a
23 rather significant contributor, one that has to
24 be addressed and included in the -- in the
25 analysis. And again, this is something that

1 was not perhaps given as much attention as we
2 would like to see in the site profile for Rocky
3 Flats. And again, we're talking about the site
4 profile -- and maybe somebody can correct me, I
5 believe it was 2003 when it was generated and
6 that -- certainly the version that we looked
7 at, so it's been certainly a couple of years --
8 I'm sorry, 2004, so it was a bit over a year
9 since that was issued that we looked at it.
10 Now my understanding based on yesterday's
11 conversation -- discussion that we had,
12 certainly -- and this is reflected in the
13 report, as well -- that there's an OTIB, which
14 is a Technical Information Bulletin, a guide --
15 additional Implementation Guide that's being
16 worked on and may be issued soon that addresses
17 insoluble oxides. And this is certainly going
18 to be the avenue by which we get more specific
19 guidance and parameters from NIOSH to address
20 this particular issue. Now I don't know
21 whether it'll be in time for the discussions
22 that we're going to have, but we're hopeful
23 that that would be in fact the means by which
24 we could tackle the question of insoluble or
25 certainly somewhat insoluble plutonium

1 compounds.

2 Another issue that certainly the SC&A team

3 addressed is the inadequacies in neutron

4 exposure -- excuse me one second, I'm trying to

5 get this thing to work; there we go, went too

6 far -- inadequacies in neutron exposure

7 characterization. Now we've -- certainly look

8 at the -- the neutron dose reconstruction

9 program, one that's been underway for seven or

10 eight years, as a good means to develop the

11 correction factors to apply to the NTA-

12 monitored workers, the ones that were in fact

13 monitored using NTA film. The corrections that

14 were made through that process I think does

15 respond to the issues that revolved around what

16 workers were in fact receiving from neutron

17 exposures. Our concern, frankly, is how one

18 can extend those correction factors beyond the

19 NTA energies to not only other energies below

20 the 700 to 800 keV threshold, but to other

21 workers. Because again, the NTA film study, the

22 NDRP* study focused on workers that worked in

23 the plutonium operations, so it did not include

24 workers in non-plutonium operations or workers

25 that may have been exposed to specific sources

1 of neutrons beyond those production facilities.
2 At any rate, certainly the concern is to make
3 sure that we have correction factors that are
4 broadly applied for neutron exposures across
5 the Rocky Flats operations. Now at this point
6 we feel that the NDRP data focuses on a key,
7 but not a complete, part of that spectrum.
8 For those on the other end of the phone, we're
9 having some technical difficulties that we're
10 trying to resolve here, so stand by.

11 (Pause)

12 Okay, I think we're all set here. Thank you.
13 The other issue which I think is highly
14 important to this particular process is that
15 the -- and I know some of you are aware of
16 this. University of Colorado has a number of
17 job category-specific neutron exposure data
18 which, in the analysis that we were involved
19 with and the sampling that we did, certainly
20 was very important -- important from the
21 standpoint of looking at potential coworker
22 models, the assignment of neutron exposures to
23 perhaps workers that were not monitored. Now
24 in our discussions with the University of
25 Colorado and our discussions with NIOSH, it

1 just became clear that certainly the data is
2 there, but wasn't yet available to NIOSH and
3 NIOSH was going through great pains to try to
4 gain access to it. So really I think our only
5 finding and sense on this is that it's very
6 important information and information that
7 should be reflected in the analysis as soon as
8 possible, but we're certainly appreciative of
9 the efforts that have been underway to get that
10 data.

11 Is there any questions on the other side? I --
12 are you still there?

13 **MS. BOLLER:** Yeah, this is Carolyn in
14 Congressman Udall's office. Is that CU data,
15 is that coming from Dr. Rutenberg*?

16 **MR. FITZGERALD:** Yes, that's correct, and
17 there's -- again, we've talked to -- talked to
18 him and I think NIOSH has been in regular
19 contact, as well. So again, that -- that
20 information is -- is certainly relevant, just a
21 matter of obtaining and gaining access to it.
22 And NIOSH may have a few more words to say
23 about that since they've been in more direct
24 contact.

25 The next --

1 **MR. HILLER:** (Unintelligible) --

2 **MR. FITZGERALD:** -- issue I want --

3 **MR. HILLER:** -- (unintelligible) --

4 **MR. FITZGERALD:** -- to talk about is something
5 that we're very concerned about, and something
6 that we feel needs to be unpacked more in the
7 site profile characterization. This gets to
8 the heart of the reliability or validity of the
9 data that we're -- that we're using in the dose
10 reconstruction process. And this is something
11 that certainly the Board and we, in our
12 reviews, look at quite closely at each site.
13 It's almost the cornerstone, whether or not the
14 data is reliable, whether or not we can
15 understand the pedigree for it and be able to
16 trace how in fact it is applied.
17 At Rocky Flats it ha-- certainly Rocky Flats
18 has a long history and certainly a complexity
19 in terms of the operations, and it also has
20 certainly accounts that we find troublesome
21 that we are still going through and trying to
22 take to ground. But these include a number of
23 concerns related to the data itself. Certainly
24 questions -- and this gets to the dosimetry --
25 questions on algorithms and dosimeter

1 calibrations. That particular issue, the
2 question of calibrating the dosimeters,
3 surfaced both in GAO investigations and
4 testimony on the Hill, as well as internal DOE
5 oversight reviews. So it's not a new issue,
6 but certainly is -- is a issue -- and this
7 again cropped up in the '80s and '90s looking
8 back historically -- which raised important
9 questions about how in fact dosimeters were
10 calibrated, were they in fact calibrated
11 correctly and -- and what implications does
12 that hold to the reliability of the data that
13 was generated by that dosimetry.
14 We have certainly other issues. The historic
15 assignment of zero doses, null doses, and in
16 some cases a category which I frankly haven't
17 seen at other sites but certainly at Rocky it's
18 been used is this question of "no data
19 available". And looking at the history -- and
20 again, we -- we did a sampling review. It
21 wasn't an exhaustive, research over time, but
22 certainly did a sampling review. We certainly
23 saw enough evidence that historically these
24 values, these placeholders were in fact used in
25 the record in a way which, in our mind, raised

1 questions about the policies that were behind
2 the use of these values and what practice was
3 in place over time, and whether or not -- I
4 guess the question -- the word I've -- come to
5 me is legitimacy, whether in fact these were
6 legitimate values or represented values that
7 were used in place of -- of actual dose
8 estimates or dose measurements. Again, from
9 worker interviews as well as from the accounts,
10 as well as the investigation reports that we
11 looked at, more questions were raised than
12 answered. Certainly it does speak to the
13 reliability of the data and one that we would
14 want to make sure that the site profile was
15 complete on and if anything were to provide
16 some substantiation as to how were these used,
17 these terminologies, how these terms, these
18 units used and on what basis were they
19 assigned.

20 Another question is the presence of blanks. In
21 this case we found that in some instances the
22 record shows literally a blank instead of an
23 actual reading, and in those cases we've
24 established that at some point in time,
25 probably prior to '64, that was used where

1 somebody had a security badge but did not have
2 a dosimeter. So in fact it was left blank, and
3 that was the -- kind of the understanding in
4 terms of practice. Post-'64 everybody had a
5 combination security badge/dosimetry, and at
6 that point in time you would not expect to see,
7 quote, blanks showing up in the record.
8 Now in our review we did see some instances of
9 blanks still showing up in the post-'64 time
10 frame. I think, again, we would raise those as
11 issues that ought to be addressed and looked at
12 and put to bed by NIOSH. It gets to, again,
13 the question of reliability.
14 A number of these may have perfectly suitable
15 explanations. I think our concern is that they
16 represent loose ends on the reliability issue
17 that need to be resolved as we go through and
18 actually bring this to fruition.
19 Now the other issues I think are in your matrix
20 so I'm not going to go through them all, but
21 things like the placement of dosimeters in
22 relationship to aprons and the question of
23 where dosimeters were worn, these are issues
24 that I think we've seen at other sites.
25 They're not new issues. I think, common to a

1 plant that has a history as long as Rocky
2 Flats, there certainly would be instances like
3 that. But again, we want to be sure about
4 those things and certainly the workers we've
5 talked to have raised these issues to our
6 attention, as well.

7 Let me pause for a second. That's sort of a
8 lot of information. You don't have the benefit
9 to view graphs. Are there any questions on
10 some of those issues?

11 **MR. HILLER:** This is David Hiller.

12 **MR. FITZGERALD:** Hello?

13 **MR. HILLER:** When you -- when you suggest that
14 -- that you're not sure of the -- the reason
15 why you see blanks in the records or why values
16 were ascribed sort of as placeholders, how --
17 what is the potential impact of those questions
18 if they're not satisfactorily answered?

19 **MR. FITZGERALD:** Well, clearly if we can't come
20 up with a substantiation of what the practice
21 had been -- you know, what you get down to is
22 some question of how you would assign dose.
23 And of course NIOSH has addressed this issue at
24 other sites and I'll let -- certainly they can
25 answer this, as well, but what we're trying to

1 get to is a sense of what does this mean in
2 terms of the data that's applied, and should in
3 fact some special measure be recommended on
4 behalf of NIOSH to address these gaps. They --
5 you know, they represent gaps that may in fact
6 be real doses, but for whatever reason, either
7 a zero, a blank, perhaps no data available --
8 you know, one of these terms were substituted
9 for what should have been a -- an actual dose.
10 We're not drawing that conclusion at all at
11 this point, but we're just indicating that I
12 think we need a better handle on that
13 particular question. And if it turns out that,
14 you know, we can't -- you know, from the
15 historical standpoint -- figure out what the
16 practice had been, then I think from a
17 conservative standpoint NIOSH would have to
18 address that issue as a gap in the database and
19 -- and weigh the implications on the
20 reliability of the overall data. Right now I
21 think we're posing more questions than answers,
22 but I think that is exactly right, we have to
23 come to a understanding of how that happened.
24 **MR. DEMAIORI:** Joe, this is Tony DeMaiori with
25 the steelworkers.

1 **MR. FITZGERALD:** Hi.

2 **MR. DEMAIORI:** On the question of no current
3 data available, historically at Rocky Flats
4 that was a term used for unexplained dose. If
5 your dose was way too high for the operation
6 that you were currently working, they would
7 zero it to no current data available. It was
8 done routinely over the years.

9 **MR. FITZGERALD:** Well, obviously we would be
10 concerned about that. But you know, again, I
11 think -- we picked this up in the
12 documentation. We certainly heard it from your
13 coworkers, and it raises enough questions and
14 concern that we wanted to convey that to NIOSH
15 and certainly recommend that this is something
16 that deserves further attention and -- and
17 substantiation. At this point certainly it's -
18 - it's one of the number of questions that go
19 to the reliability of the data.

20 I want to go ahead and just speak to a number
21 of issues which probably don't rise to the --
22 necessarily rise to the significance of -- of
23 the other issues, but certainly have some
24 potential -- some of them have some potential
25 as we work through this. As you'll see in your

1 matrix, certainly we raise concerns that ranged
2 from the assumed default particle size that was
3 being used, and I think we had a useful initial
4 dialogue on that with NIOSH. This is the five
5 micron AMAD. And I think the -- certainly the
6 notion is that there is a practice of applying
7 what available data there is before going to
8 the default particle size. But again, we were
9 concerned that that wasn't as clear as it could
10 be.

11 Another issue that we still haven't unpacked
12 but we're going to spend some time on is this
13 notion of -- of how one uses the americium 241
14 actual material assay as a means to calibrate
15 against the -- the lung counting for plutonium.
16 And our concern there, again, is where you have
17 lung counting with either pure or relatively
18 pure plutonium, but don't have the americium
19 marker; is there a concern there that that may
20 in fact pose some challenges in terms of the
21 actual dose recorded. That's something I think
22 we can clarify. Again, we haven't had a -- the
23 extensive exchange yet on these issues with
24 NIOSH. That process is just starting, but
25 certainly we'll be talking about that.

1 Some of the other issues, the assignment of
2 isotropic and rotational instead of anterior-
3 posterior geometry, which is fancy talk for
4 saying, you know, how is a person positioned to
5 the radiation source. We feel that there are
6 certainly work locations, type of work at Rocky
7 Flats where the optimal exposure position for a
8 worker and his badge may not be conservative
9 capturing -- giving credit to as much radiation
10 as possible. And I think what we heard
11 yesterday, which is certainly very positive, is
12 that NIOSH is considering going to a very
13 conservative approach of using the AP or
14 anterior-posterior geometry.

15 One issue that we looked at at all sites
16 because with Department of Energy facilities
17 there was a lot of movement of materials
18 between sites, and you know, whether it was
19 recycled uranium or shipments of -- of material
20 from one site to another, this was standard
21 practice across the weapons complex, and Rocky
22 was no exception. And I think for Rocky Flats
23 the recycled uranium issue was not as
24 prominent. However, certainly over time
25 there's questions of other materials being

1 shipped, and I think we looked at two or three
2 instances -- just as -- again, as illustrative
3 examples, the U-233 uranyl solution --
4 solutions from Oak Ridge. Certainly there were
5 shipments going from Oak Ridge to -- to Rocky
6 Flats for processing. Uranium 236 from reactor
7 core recoveries from Idaho, that was going to
8 Rocky way back when. So you know, you have a
9 number of these things where we felt the site
10 profile could be improved by characterizing
11 some of these shipments that were not main
12 process items, but nonetheless represented part
13 of the operation and certainly a potential --
14 you know, I look at U-233 with the U-232,
15 certainly a potential for exposure for workers
16 that might have handled that specifically.
17 That is pretty much the highlights of the
18 matrix as -- as we stand at this point in time.
19 Again, this is the earliest part of the process
20 of interchange with NIOSH on behalf of the
21 Board. And as with other sites, we intend to
22 engage NIOSH in these particular issues and
23 certainly attempt to either converge or
24 identify issues that have to be further
25 addressed.

1 Is there any further questions from the
2 audience in Colorado? Or anyone here, I guess,
3 for that matter -- I'm sorry.

4 **DR. ZIEMER:** Well, we'll take questions here in
5 a moment, Joe. But thank you very much. I
6 want to point out particularly to the
7 delegation in Colorado that there already has
8 been -- over the past I guess three months --
9 two or three months -- ongoing exchanges
10 involving our contractor, SC&A, NIOSH and a
11 working group of the Board to address the
12 various issues in the matrix. And particularly
13 --

14 **MR. GRIFFON:** That's not quite true.

15 **DR. ZIEMER:** Well --

16 **MR. GRIFFON:** The workgroup wasn't involved.

17 **DR. ZIEMER:** -- right, I'm sorry. There --
18 there's been exchanges. I think -- I've seen
19 some e-mail exchanges, at least, where the
20 questions and so on, but we'll get some
21 clarification here. There've been some early
22 exchanges of information, but looking forward,
23 we -- we have a process that does involve
24 formal, face-to-face exchanges. It's a process
25 that's been used for other site profiles and

1 one which will be used here involving the
2 contractor, NIOSH and a Board working group.
3 And we will want to extend the invitation to
4 someone representing the petitioners to
5 participate in that, as well. So we would let
6 you folks know when such meetings take place so
7 that, if you so desire, you could have a
8 presence there, as well, as these issues are
9 discussed and we move toward resolving items
10 that are raised on the site profile.

11 Also I believe there -- the initial review of
12 the site profile was what we call Rev. 0, which
13 is the early site profile. I believe we're at
14 Rev. 1 now, are we not, Jim, as -- I'm asking
15 Jim Neton now, of NIOSH.

16 **DR. NETON:** Actually I think there's six
17 chapters to the site profile. Each has their
18 own unique --

19 **DR. ZIEMER:** Oh, a revision, right.

20 **DR. NETON:** -- revision number. Some are at --

21 **DR. ZIEMER:** Some are at Rev. 1 --

22 **DR. NETON:** -- Revision 1, but most are still
23 are Revision 0.

24 **DR. ZIEMER:** -- right. So it's a bit of a mix,
25 but it's an ongoing process of updating the

1 site profile as new information is gained.

2 **DR. NETON:** Correct.

3 **DR. ZIEMER:** Now let me open the floor for
4 Board questions here, or comments.

5 **DR. WADE:** I'd only like to -- this is Lew Wade
6 -- to make one comment, then maybe Jim has a
7 comment to make in terms of the status of
8 things with regard to NIOSH. And my comment is
9 simply to remind you of the time lines we're
10 looking at and sort of what's in front of us.
11 We talked about this yesterday, but the Board
12 does have a phone call meeting scheduled for
13 March 14th, a face-to-face meeting scheduled
14 for April 25th, 26th and 27th. My tentative
15 plan is to hold that meeting in Denver,
16 Colorado. I would certainly hope we'd be in a
17 position to have the Board presented with an
18 evaluation plan before that meeting and have
19 the Board make a recommendation to the
20 Secretary on the Rocky Flats site profile
21 (sic). That said, there's work to be done and
22 I would like the Board to -- to put in motion
23 what it needs to put in motion to see that we
24 can achieve those goals.
25 Jim, could you just update us very quickly as

1 to NIOSH's position now relative to this
2 process?

3 **DR. NETON:** Yeah, I don't want to take up a lot
4 of the Board's time. We went over in some
5 detail yesterday NIOSH's draft responses to the
6 21 individual issues that were identified in
7 what I'll call the consolidated matrix that
8 came out in mid-December. It's available on
9 the table. I believe the folks in the Colorado
10 delegation and the union representatives or
11 petitioners have -- have that document now. I
12 do believe that SC&A has done their usual very
13 thorough job reviewing this profile, and we
14 commend them for that.

15 I just do want to point out that the
16 consolidated matrix and all the efforts right
17 now are -- we're going to try I think to be
18 directed towards resolving issues that are of
19 specific relevance to the site profile -- I
20 mean the SEC --

21 **DR. ZIEMER:** SEC --

22 **DR. NETON:** -- petition we have in our hands at
23 this time, and I think Joe did a good job
24 summarizing the five key issues, along with the
25 other lesser significant issues. I think the

1 first two he mentioned, the MDA issue and the
2 super insoluble material, we've come a long way
3 towards resolving or coming -- coming to terms
4 with SC&A already. I look forward to working
5 with them and addressing the other issues in
6 the upcoming working group meetings.

7 **MS. BOLLER:** This is Carolyn with Congressman
8 Udall's office.

9 **DR. ZIEMER:** Yes.

10 **MS. BOLLER:** I just want to make one statement.
11 First of all, we believe it's extremely
12 important that Tony and his folks be actively
13 involved in this whole process, so it's good to
14 know that that offer has been made and we
15 should be kept in -- he should be kept in the
16 loop.

17 **DR. ZIEMER:** Yes.

18 **MS. BOLLER:** The second piece is, I believe the
19 entire delegation is very well aware of a lot
20 of these issues, and we are very supportive of
21 this petition. We all get those phone calls
22 from those people who are sick and dying while
23 we're going through this process. And while we
24 don't want you to skip over something, we -- we
25 would strongly encourage you to get this thing

1 done so that we can -- can talk with our folks
2 about it, who are sick, who worked at Rocky
3 Flats, and who need these benefits.

4 **DR. ZIEMER:** Yes, thank you. Mark Griffon has
5 a comment.

6 **MR. GRIFFON:** Just actually a couple of
7 questions maybe. One for Joe, I just wanted to
8 clarify this finding number two on the matrix,
9 and it talks about the high-fir-- the super S
10 class and the doses to the GI tract.

11 **MR. FITZGERALD:** Right.

12 **MR. GRIFFON:** I'm not sure we have time to get
13 into it here at the Board level, but it
14 references page 40, and all the -- all the
15 tables I see there compare Type S and Type M.
16 I don't see any super S compared, and it also
17 seems to me that the GI tract doses per sievert
18 excreted are higher, but it's not intake, so I
19 just --

20 **MR. FITZGERALD:** Well, I think if --

21 **MR. GRIFFON:** I want to know if --

22 **MR. FITZGERALD:** Right.

23 **MR. GRIFFON:** -- there's a specific table that
24 addresses this issue of the super S compared --
25 you know.

1 **MR. FITZGERALD:** Actually I think in the
2 analysis we established that the so-called
3 super S was synonymous with S, and I don't
4 think we found a distinction that was worth
5 making the distinction for in the table itself,
6 so the S is the super S --

7 **MR. GRIFFON:** Okay.

8 **MR. FITZGERALD:** -- in a sense. On the other
9 issue, I -- you have me at a disadvantage since
10 I don't have my internal dosimetrist.

11 **MR. GRIFFON:** Yeah, 'cause when I look at it I
12 see sievert per -- sievert per becquerel
13 excreted.

14 **MR. FITZGERALD:** Yeah, we'll have to get that -
15 - we'll have to --

16 **MR. GRIFFON:** Certainly the numbers are higher
17 for the lower large intestine and
18 (unintelligible) --

19 **MR. FITZGERALD:** I'll have to clarify that
20 later.

21 **MR. GRIFFON:** -- and that would be expected
22 'cause it --

23 **MR. FITZGERALD:** Right.

24 **MR. GRIFFON:** -- (unintelligible) slower, but -
25 - but sievert per intake, if you -- if you make

1 sure you're bringing urine data back to intake
2 values --

3 **MR. FITZGERALD:** Right.

4 **MR. GRIFFON:** -- I think -- I'm surprised by
5 that, so I guess we have to look into that
6 further, maybe at the -- Jim wants to
7 (unintelligible) --

8 **DR. ZIEMER:** Jim -- Jim Neton can respond here.

9 **DR. NETON:** I might be able to clarify a little
10 bit. I don't think the super S issue has gone
11 away. I think we all acknowledge that there is
12 highly insoluble compounds, more than Class S,
13 at Rocky Flats. It's been demonstrated in
14 autopsy cases at Rocky and at the Transuranic
15 Registry. The issue with the GI tract -- we
16 believe the doses to the lung are adequately
17 covered by S because they're already more --

18 **MR. GRIFFON:** (Off microphone) (Unintelligible)

19 **DR. NETON:** -- more than likely over 50
20 percent, we've been through that. The issue
21 with the GI tract is that if you calculate
22 intake based on a urinary excretion using S,
23 you're going to come up with some value. If it
24 really is super S, the intake retention
25 fraction you applied is inappropriate and the

1 intake could be possibly orders of magnitude
2 higher. If that's the case, even though it's
3 coming out more slowly, if you integrate the
4 dose to the GI tract over 50 years, you may end
5 up with a higher dose to the GI tract, or
6 underestimate it. And that, in my mind, is the
7 only real issue remaining on the table.

8 I think we can pretty much demonstrate systemic
9 organs are adequately covered by S, and -- and
10 lung cancers are adequately going to be
11 probably compensated by S. So this GI tract
12 issue I think is the central issue here.

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

14 **MR. GRIFFON:** I agree with that. I agree with
15 that point, I just didn't see that in the
16 tables that I was looking at, so...

17 **MR. FITZGERALD:** Again, I think that -- that's
18 the reason. We didn't make a distinction in
19 the tables between super S and S, but focused
20 on S.

21 **DR. ZIEMER:** Okay. Thank you. Other comments?

22 **MR. GRIFFON:** Yeah, I -- this is --

23 **DR. ZIEMER:** Mark, go ahead.

24 **MR. GRIFFON:** -- I guess this is for Jim, too,
25 I -- I'm just wondering, and since you

1 mentioned that -- that the priority issues were
2 focusing on now, I guess one thing that -- that
3 comes to my mind is, of the claimants in the
4 SEC petition class, is there any coworker model
5 here? I'm not sure whether Rocky relies on a
6 coworker model and if that's included in the
7 site profile review or...

8 **DR. NETON:** That was actually one of the
9 comments that SC&A made was that they weren't -
10 - they didn't see evidence of a coworker model.
11 And much like the Y-12 site profile, we
12 typically don't include the coworker models in
13 the site profiles. It would be modeled
14 separately and we will have a coworker model
15 for Rocky Flats --

16 **MR. GRIFFON:** (Off microphone) But since --
17 since we are in this sort of middle ground here
18 between a petition and a site profile, I think
19 (unintelligible) --

20 **DR. NETON:** We're well aware that we need to
21 have a coworker approach to cover those cases,
22 and we -- we --

23 **MR. GRIFFON:** (Off microphone) And I guess the
24 same follow-up that we asked for Y-12, maybe we
25 want to get a sense of how -- how many members

1 of the cl-- what percentage of the class this
2 might affect, the coworker model. If it's
3 going to be --

4 **DR. NETON:** Right.

5 **MR. GRIFFON:** -- used for 80 percent like with
6 Y-12 or is it -- is it a much smaller
7 percentage.

8 **DR. NETON:** Right, I think we understood --

9 **MR. GRIFFON:** (Off microphone) (Unintelligible)

10 **DR. NETON:** -- that we need to give the Board
11 some sense as to what we -- you know, what
12 we're going to be extrapolating and what's
13 going to be based on real data.

14 **MR. GRIFFON:** And then the other, Jim -- the
15 other obvious follow-up from me, since you're
16 probably ready for this, is the integrity or
17 validity of the data. That's come up in a
18 finding. Has any of the -- have you made any
19 progress toward exploring ways to validate the
20 data?

21 **DR. NETON:** We're working towards that with
22 ORAU as we speak. I mean we -- we recognize
23 that this is going to be a recurring issue.
24 You see some of those issues reflected in the
25 SC&A review, but we also know that we need to

1 go back and look at the -- any electronic
2 records we have and look at the pedigree of
3 those and establish some comfort to the Board
4 that they -- they are what they purport to be.

5 **MR. GRIFFON:** Part of the reason I raise these
6 is to -- to Lew's point of this time line, and
7 these are certainly easy points to say but hard
8 points to -- to (unintelligible).

9 **DR. NETON:** We understand, yeah, that is --
10 that we're under the gun right now.

11 **DR. ZIEMER:** Let me direct this question also
12 to either Jim Neton or Larry Elliott. This is
13 relative to the April meeting, and Lew has
14 pointed out the desire to be ready to present a
15 recommendation on the SEC to the Board. You
16 have seen at least the preliminary drafts of
17 what the Board thinks an SEC procedure for us
18 should look like in terms of the issues that
19 need to be addressed. Do you feel fairly
20 confident at this point, if we have something
21 that looks pretty much like the draft that
22 you've already seen, that you'll be in a
23 position to -- to address the issues, including
24 sample dose calculations and so on, along the
25 lines that were described in Dr. Melius's

1 presentation on -- on the format and so on?

2 **DR. NETON:** We are behaving as if something
3 similar is going to be -- be the benchmark. We
4 can't predict it will, but --

5 **DR. ZIEMER:** Yes.

6 **DR. NETON:** -- but we're working towards that
7 end, the pedigree of the data.

8 **DR. ZIEMER:** Yes.

9 **DR. NETON:** I think the second issue which is
10 key, that -- that -- again, many of these
11 issues are raised in SC&A's review, maybe not
12 in exactly the terms that are in the draft
13 document from the Board, but such -- things
14 such as if you have a lot of data, make sure
15 that all the other ancillary nuclides that were
16 there that could have resulted in exposure are
17 covered with some type of monitoring program
18 and some approach, and also the draft example
19 dose reconstructions for those activities. So
20 -- but we're working towards that. We -- we're
21 trying to fill those holes.

22 **DR. ZIEMER:** Understood, and just -- at this
23 point no one has identified any show-stoppers
24 in achieving that, I guess, or gaps that have
25 been overlooked -- well, I guess if it's a gap,

1 we don't know that it's...

2 **DR. NETON:** Yeah. I think the pedigree issue
3 or the reliability issue is --

4 **DR. ZIEMER:** Is going to be the key thing.

5 **DR. NETON:** -- is going to be the key thing
6 right now. We -- we need to be moving forward
7 on that fairly rapidly, 'cause if we can't
8 address that issue, then the other ones are not
9 even relevant anymore.

10 **DR. ZIEMER:** Right.

11 **DR. NETON:** I mean if you don't have good data
12 --

13 **DR. ZIEMER:** Right.

14 **DR. NETON:** -- 'cause we're hanging our hat on
15 that data to develop these models.

16 **DR. ZIEMER:** Thank you. Dr. Melius.

17 **DR. MELIUS:** Yeah, just to follow up on that.
18 I would also hope that we'd be able, in our
19 discussion later this afternoon on the
20 workgroup report, as well as SC&A's procedure -
21 - or presentation on SEC -- procedure for SEC
22 review, we would be able to meld that process
23 into (unintelligible) to the extent that that
24 would also facilitate the nature of SC&A's
25 review to not be just on a site profile, but

1 also on the SEC evaluation. I think that could
2 be helpful and (unintelligible) will be a
3 proposal to be able to get that underway right
4 after this meeting, so that's -- is what we
5 hopefully will be able to do and hopefully
6 that'll all work out for -- for this particular
7 petition.

8 **DR. ZIEMER:** Okay. Any additional comments or
9 questions?

10 **MR. HILLER:** This is David Hiller. Let me --

11 **DR. ZIEMER:** Yes, David.

12 **MR. HILLER:** -- ask one other question, if I
13 may, please.

14 **DR. ZIEMER:** Yes.

15 **MR. HILLER:** In the -- the NIOSH response on
16 this -- on the matrix, issue nine, which is, as
17 I understand it, the issue that raises these
18 questions of reliability and validity of the
19 data, NIOSH indicates it's not the purview of
20 the TBD to correct any operational deficiencies
21 in a non-extant program. We certainly
22 understand that and don't hold NIOSH
23 responsible for what wasn't done at Rocky Flats
24 over the past decades. But it seems that this
25 goes directly to the issue that will be before the

1 advisory committee in terms of whether it is
2 feasible or not feasible to estimate with
3 sufficient accuracy the radiation dose that the
4 class received. Am I understanding the
5 conversation correctly that that is the -- the
6 most critical issue that you're looking at?

7 **DR. ZIEMER:** Jim Neton is going to address that
8 here, just --

9 **DR. NETON:** David, I didn't know if you were or
10 were not on the call yesterday when we went
11 over the resolution matrix, but I indicated in
12 my presentation that we actually were off the
13 mark in what the intent was for question -- or
14 comment number nine, and will be revising that
15 -- our response. The response that you see
16 from NIOSH addresses an internal dosimetry
17 issue, not the external dosimetry issues that
18 were raised related to calibration and people
19 not wearing badges and that sort of thing.
20 Related to your -- it's not the purview of the
21 TBD to correct operational deficiencies in non-
22 extant programs, I'm not actually clear what
23 was meant by that, either, at this point, and I
24 will promise that I will get back and get an
25 interpretation of that.

1 **DR. ZIEMER:** Well, you got an answer to -- that
2 is that the matrix shows the wrong information
3 --

4 **DR. NETON:** Yeah, (unintelligible) at this
5 point.

6 **DR. ZIEMER:** -- so we will get the right
7 information and need to get that transmitted --

8 **DR. NETON:** We will be --

9 **DR. ZIEMER:** -- to the Colorado --

10 **DR. NETON:** -- revising the matrix --

11 **DR. ZIEMER:** -- folks, as well.

12 **DR. NETON:** -- and getting that out.

13 **DR. ZIEMER:** Yeah.

14 **MR. HILLER:** Okay. Well, I appreciate that.
15 But that still -- with regard to --

16 **DR. ZIEMER:** The question may remain.

17 **MR. HILLER:** -- the issue of reliability and
18 validity, that still seems to be a critical
19 issue in terms of the accuracy of the radiation
20 dose. Am I right?

21 **DR. NETON:** We totally agree with that. Yes.

22 **MR. HILLER:** Let me just say then that -- to
23 follow up on Carolyn's earlier comment, that
24 Senator Salazar, and I think all of the
25 delegation, is -- is focused on that issue.

1 And if we don't have sufficient information to
2 determine the dose to this class, then you
3 know, we need to get this petition resolved
4 immediately.

5 **DR. ZIEMER:** Yes, thank you.

6 **DR. NETON:** Understood.

7 **DR. ZIEMER:** Uh-huh.

8 **MR. HILLER:** Thank you.

9 **DR. ZIEMER:** Any further comments?

10 **DR. WADE:** If no one else does, I have a
11 couple.

12 **DR. ZIEMER:** Yes, Lew, uh-huh.

13 **DR. WADE:** One is a comment, one is a question
14 to the Board. I mean life with this Board is
15 about tensions, and there's always tensions,
16 and we're going to face another tension. I
17 mean NIOSH, as an organization, needs to decide
18 when it's prepared to bring an evaluation
19 report to the Board. NIOSH has many things to
20 consider there. They will be considering the
21 Board's desire for information of a certain
22 type. It could well be that NIOSH will feel
23 compelled to bring an evaluation report to the
24 Board before it can meet all of those tests.
25 And again, clearly we would rather not do that,

1 but -- but that is a tension that we'll face,
2 and I just want it to be on the record as to
3 that tension.

4 The other issue that I have is, when the
5 working group meets -- and I assume there will
6 be a working group -- I would like the Board's
7 guidance as to whether you want those working
8 group meetings to be open to the public or not.
9 I know it's a small issue, but it's one that's
10 important for us in terms of doing our planning
11 and our noticing. So I assume that you will
12 have a working group address Rocky Flats
13 issues, and I'd like to hear a little bit about
14 that, and then I would like some guidance as to
15 whether you want those issues open -- those
16 meetings opened. If they're not opened, we
17 certainly will have the petitioners present and
18 represented, but the Board has advised
19 different ways for different meetings, so I'd
20 be curious as to your guidance.

21 **DR. ZIEMER:** Jim, you have a --

22 **DR. MELIUS:** I just want to --

23 **DR. ZIEMER:** -- comment? Jim Melius.

24 **DR. MELIUS:** -- respond to Lew's comments. I
25 understand what you're saying, Lew, but at the

1 same time I think, based on -- to some extent
2 on our past experience and so forth, it is not
3 helpful to the Board, to the credibility of the
4 overall SEC process and the overall program for
5 the premature attempt to review an SEC
6 evaluation, SEC petition. I think it actually
7 sets us back more than it moves -- thing ahead.
8 It certainly tends to waste everyone's time
9 involved, and I think if anything increases
10 tension than decreases it. So I would hope it
11 would be done very carefully. If there's a
12 legitimate disagreement on -- on whether or not
13 an issue's been satisfactorily resolved or is
14 at the point of satisfactory resolution, that's
15 one thing. For sort of a deliberate saying
16 well, we don't care what you say, we're going
17 to present it anyway, only to have us then say
18 well, no, we want this or, you know, that's not
19 appropriate, then -- then I don't think that's
20 -- that's helpful and it just shifts -- it just
21 doesn't help.

22 **DR. WADE:** I understand. I think we'll be --
23 we'll talk about that issue a bit tomorrow when
24 we talk about this draft rule, the rule that's
25 out there and your comment on the rule. But

1 there are -- there are considerations that have
2 to be taken into account.

3 **DR. ZIEMER:** Board members, do you -- do you
4 have any preferences and -- we have -- we have
5 this site profile and SEC, we have others
6 coming down the line. Certainly in all cases
7 the information will be made publicly
8 available, as a minimum, and we will invite
9 representatives of the petitioners. Do you
10 want the meetings open beyond that?

11 **UNIDENTIFIED:** Joe, is it possible for us to
12 get a copy of your presentation?

13 **DR. ZIEMER:** Yes, we will -- we can -- can we
14 get that FAXed out there?

15 **MR. FITZGERALD:** We have electronic as well as
16 hard copy, so either way, we can
17 (unintelligible).

18 **DR. ZIEMER:** We'll try to --

19 **UNIDENTIFIED:** (Unintelligible)

20 **DR. ZIEMER:** -- get that out as quickly --

21 **UNIDENTIFIED:** (Unintelligible)

22 **DR. ZIEMER:** -- as we can. We'll need to,
23 maybe off-line, find out where to send it.

24 **DR. WADE:** Jason can do it.

25 **DR. ZIEMER:** Jason can do that. Yes, we'll get

1 **DR. ZIEMER:** So there will be a complete and
2 open record on all the proceedings.
3 Now Board members, the other issue to keep in
4 mind as we kind of proliferate on reviewing
5 site profiles, so far we've had one working
6 group dealing with all of them. I know most of
7 you would like to have that same working group
8 do them all, and -- and the new guys are coming
9 on board, but do you -- do you want to have at
10 least one additional work group to sort of
11 divvy the work up, or -- how does the exist--
12 let me ask the existing workgroup how they feel
13 about multiple -- I know that if you go to
14 Cincinnati for one of these meetings, from an
15 efficiency point of view, you may as well do
16 two as one, perhaps. But nonetheless, it
17 throws a burden on a few of the members to
18 handle the bulk of the workload. Mark, you --
19 why don't you respond 'cause you've -- you've -
20 -

21 **MR. GRIFFON:** Well, I -- we've started into
22 Rocky, so I sort of have a -- you know --

23 **DR. ZIEMER:** You don't want to give that up.

24 **MR. GRIFFON:** -- (unintelligible) gotten into a
25 little bit.

1 **DR. ZIEMER:** Right, right.

2 **MR. GRIFFON:** But I mean the other question I
3 guess would be at some -- you know, at what
4 point is this a subcommittee where -- it seems
5 like it's a standing -- although we have
6 different tasks. I guess we change tasks --

7 **DR. WADE:** Right.

8 **MR. GRIFFON:** -- so...

9 **DR. WADE:** Yeah, I think we can continue at
10 least through Rocky to do this as a workgroup.

11 **MR. GRIFFON:** Yeah. I mean I (unintelligible)
12 --

13 **DR. ZIEMER:** Well, if there -- if --

14 **MR. GRIFFON:** -- (unintelligible) on these
15 conference calls and --

16 **DR. ZIEMER:** Yeah.

17 **MR. GRIFFON:** -- (unintelligible) matrix so far
18 with Rocky, so (unintelligible) --

19 **DR. ZIEMER:** If there's no objection, we can
20 keep the same workgroup, at least through
21 Rocky, and that again would be Mark Griffon,
22 Robert Presley, Michael Gibson and Wanda Munn.
23 The four of you are willing and able? Yes.

24 **DR. WADE:** Able, no question.

25 **MS. MUNN:** Depends on who you ask.

1 **DR. ZIEMER:** Okay, that will be at least the
2 working group. We can add to that if we wish
3 when we get new members aboard, but we'll start
4 out with that. The workgroup will -- will
5 coordinate with NIOSH and SC&A, and will -- we
6 need to bring the Denver folks -- who will that
7 be from the petitioners there? That will be --

8 **MR. DEMAIORI:** It'll be Tony DeMaiori with the
9 USW.

10 **DR. ZIEMER:** Okay. So we'll keep you in the
11 loop as we get dates established for the--
12 these meetings typically will be in Cincinnati,
13 typically one-day meetings, but we'll -- we'll
14 keep you in the loop as we move forward on
15 that. Okay?

16 Thank you very much, all those out in the
17 Colorado delegation. We appreciate your input
18 today.

19 **UNIDENTIFIED:** Thank you. And just to add to
20 the record, let us know when there's a
21 (unintelligible) when the working group meets,
22 that'll be helpful, too.

23 **DR. ZIEMER:** Yes, we will do that.

24 **UNIDENTIFIED:** Thank you.

HANFORD SITE PROFILE - PRESENTATION
COMMENTS, DISCUSSION, PLAN OF ACTION
DR. PAUL ZIEMER, CHAIR

NIOSH

1
2 **DR. ZIEMER:** Our next item of discussion is on
3 the Hanford site profile. I would like to
4 point out that here with us, in person today,
5 is Livia Lam -- I think Livia -- is Livia still
6 here? Yes. Livia is a legislative assistant
7 for Senator Cantwell, and we welcome Livia here
8 today. Are there others from Washington by
9 phone? Okay, Livia, it's all on you then.
10 Right?

11 **MS. LAM:** (Off microphone) (Unintelligible)

12 **DR. WADE:** And in your book -- in your tab on
13 Hanford, there is communication from Senator
14 Cantwell, a response from John Howard, another
15 communication from Senator Cantwell, so I just
16 point that out to you that -- so you have some
17 history of -- of these interactions. Under
18 Hanford.

19 **DR. ZIEMER:** Under Hanford. This is the --
20 yes, this is the letter that -- it went to both
21 John Howard and to me, and some information was
22 requested, and John Howard went ahead and
23 answered that, and I saw no need then for me to
24 answer it, although I still could follow-up if
25 the Board so desired. But this was -- this was

1 one that was attended to. Does the Board feel
2 there's any additional correspondence necessary
3 at this point? Recall, again, I could not
4 respond without the Board's input, but since it
5 was addressed to both John Howard and to me and
6 John provided the requested information, we
7 basically let it ride at that. And you have
8 the correspondence there.

9 Well, let us proceed then with the --

10 **DR. WADE:** No, I need to do my conflict --

11 **DR. ZIEMER:** Oh, yes, we need to do the
12 conflict of interest statement.

13 **DR. WADE:** Now this is a site profile
14 discussion, and my notes would indicate that
15 the only Board member conflicted is Wanda Munn
16 on Hanford. Let me point out to you that the
17 policy operating to is that when discussing a
18 site profile, Board members who have a conflict
19 may participate in the discussion at the table,
20 but cannot make motions or vote on motions. So
21 Ms. Munn, you are -- you are so instructed.

22 **MS. MUNN:** I understand.

23 **DR. ZIEMER:** Okay. So the presentation on
24 Hanford for the site profile review will be
25 given by John Mauro. John, welcome.

1 **DR. MAURO:** Good afternoon, everyone. Dr.
2 Ziemer, Livia, nice to see you again. I'll be
3 giving the presentation on Hanford. In fact, I
4 think we should set the table a little bit for
5 Hanford because it was about a year ago -- a
6 little less than a year, maybe 11 months ago --
7 when work actually began. It was one of the
8 first site profile reviews that we began, and
9 it involved the typical steps -- you know,
10 reviewing the document, and we had a large team
11 of people reviewing the document, reviewing all
12 the references. We did meet -- we did meet
13 with many representatives, workers, experts.
14 We did have extensive discussions with NIOSH,
15 authors of the site profile, and the work
16 product came out -- it's this 291-page document
17 that was issued in June. And since June a lot
18 has happened. A lot of the issues that we
19 raised here, there are -- and by the way, we
20 did -- let me move this along.
21 Let's see, which one -- I guess I should use
22 this right here -- it's the other one now, and
23 I guess just press the top button or the center
24 button? We'll see in a minute. No, not that,
25 let's try this.

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(Pause)

Okay. As I was mentioning, on June 10th the large site profile review was issued. Then we were requested -- then we moved into this mode of preparing matrices. You know, a 291-page document is a lot to lift and digest and to use as a tool to try to track things, so the Board had requested on November 16th that we prepare an issues-tracking matrix, and that of course is the way we are managing ourselves these days. And we did, very recently, on January 16th send out a two-page matrix that summarizes the 11 issues -- major issues as -- it's -- to try to boil down a 291-page document into 11 issues, but you know, I think -- you know, it serves its purpose, as long as we, you know, don't lose sight that there's a lot of texture here. And so what I'm going to be doing is going through the matrix.

What I'd like to point out is when -- when you -- when you step back and you look at the site profile, you find out that it really boils down to major concerns. There are a lot of concerns, but our major concerns have to do with neutron doses, especially in the early

1 years, and we're going to talk about that quite
2 a bit. And the other has to do with exposures
3 to some exotic -- I call them exotic --
4 radionuclides. Because of the very complex
5 array of transuranics and radionuclides and
6 experiments that were involved in this -- at
7 this site over many, many years, having a good
8 handle on the types of radionuclides that were
9 at play and what the doses were to people who
10 were involved in handling that material becomes
11 very challenging. So we're really going to be
12 talking about external exposure, neutron;
13 internal exposures to plutonium, americium,
14 curium and many other radionuclides that are --
15 are of concern for the reasons we'll -- we'll
16 get into.

17 Neutron exposures are important for a very
18 simple reason. If you think back to the
19 reactors in the 100 area, they basically had a
20 neutron reflector and they had a thermal
21 shield, a biological shield. But then they had
22 hundreds -- many hundreds of holes, ports, in
23 which instrumentation, fuel was entered and you
24 look into the record, you find out that there
25 was -- lot of maintenance had to be done on

1 these units and that -- you also look into the
2 record and you find out many of the workers had
3 -- they determined they had some sodium 24 as a
4 body burden, which means that -- that's --
5 means they were exposed to some neutron
6 exposure which resulted in neutron activation.
7 So our main concerns sort of, as we got into
8 the process, is that exposure to neutrons,
9 especially in the early years, and they were
10 not really adequately monitored, especially in
11 the early years. In fact, a good break point
12 is 1972; 1972 was the year when they moved into
13 the Hanford multi-purpose dosimeter. That's a
14 dosimeter that has five elements, uses TLDs and
15 does a very nice job of measuring not only
16 gamma exposure but also neutron exposure.
17 Now we have lots of comments on that, too, but
18 those are what I call second order comments
19 where you could deal with -- you know, coming
20 at adjustment factors for properly interpreting
21 that data.
22 But prior to that -- or our main concern is
23 that okay, how good a job was done in the -- in
24 the -- in those early years when they didn't
25 have the Hanford multi-purpose dosimeter?

1 Well, in those early years what was done was
2 take advantage of data that you had on the
3 neutron-to-photon ratios. You can almost
4 visualize one of these pass-through reactors or
5 -- in the 100 area with all the ports, and
6 whenever you have a stream or a photon field,
7 you're going to have some neutrons coming along
8 with them. The -- and so -- so if you can get
9 a handle on the ratio of neutrons to photons,
10 you've got your first hook into coming up with
11 the neutron dose. So what -- what -- our main
12 concern was was a -- was a good job done in
13 coming up with the neutron-to-photon ratios.
14 Now -- and we're going to get a little -- now
15 we dig down to the weeds a little bit because
16 this is where the rubber meets the road on this
17 particular issue. Okay?

18 We're going to go back -- between 1950 and
19 1961, this was before the multi-purpose
20 dosimeters, the single-pass reactors, and I
21 listed the reactors, there -- there's good
22 reason to believe that the workers there
23 experienced some neutron exposure. They wore
24 NTA film and they did see positive readings.
25 They wore their regular film badges where they

1 got photon exposures. They said well, listen,
2 we need to somehow get a ratio, neutron-to-
3 photon ratio with the data we have.
4 Now the first thing that we notice is that with
5 the way in which the site profile comes at the
6 problem, it says well, we found seven workers
7 that worked at those facilities at that time
8 where we have both NTA film -- neutron detector
9 film -- and -- regular film badges, and so from
10 that you can come up with a neutron-to-photon
11 ratio, so we've got seven workers. Well, this
12 was the first -- now that one piece of
13 information is the first place where our
14 antenna goes up, says hmm, you've got all these
15 workers working over all these years -- I don't
16 know how many, there may be literally thousands
17 of workers somehow involved, let's say, in
18 working with all these reactors. We're really
19 not quite sure what the number of workers, but
20 in the end what we're saying is we have data
21 for seven workers where we have neutron-to-
22 photon ratios, where you simply look at the
23 photon exposures of the film badge and the NTA
24 exposure and you get a ratio of one to the
25 other. And we have it for seven workers.

1 Now what NIOSH did, and ple-- and by the way,
2 this is the first time we're bringing all this
3 forward. We have -- this is -- this may be day
4 one of what we would call the review cycle,
5 because prior to today you really haven't
6 entered into a dialogue. So as I describe --
7 summarize this information -- be very
8 interested in feedback as to whether this is
9 the proper understanding of what in fact was
10 done in this -- by -- in the site profile or
11 whether we -- perhaps we got it wrong, but my
12 understanding, our understanding is for those
13 years, for those reactors, what was done to
14 come up with the neutron to photon ratio was
15 they had seven workers. That's not very many
16 workers, given the complexity and size of the
17 site to number of workers. So that -- that's -
18 - I guess we'd say issue number one, is that
19 good enough.

20 Second thing is they said well, we've got five
21 different -- we have -- we have these seven
22 workers, but there are a lot of different ways
23 you could come up with this neutron-to-photon
24 ratio, and -- and as we understand it, NIOSH
25 used five different methods. On the left-hand

1 side is the most conservative method and on the
2 right-hand side is what we'll call the most
3 realistic method. So you could -- so the
4 neutron-to-photon ratio, based on these seven
5 workers, the average, went from a high of .431
6 -- which means if you have one rad from -- from
7 gamma, you've got .431 from neutron -- and down
8 to .09. Well, what -- what I -- our
9 understanding is, in light of this and the
10 uncertainty, the decision was made, let's go
11 with this distribution. So in other words, if
12 you're going to reconstruct a dose to a worker
13 and you have some film badge data and you say I
14 want to try to figure out what his neutron
15 exposure is, you multiply his film badge
16 readings with its uncertainty by this
17 distribution, and now you've got a distribution
18 on the neutron dose for those -- for those
19 workers.

20 Now -- so that's our starting point. It's
21 almost like the rock we're standing on, at
22 least for those reactors at that time period.
23 Okay. Now -- but then they said well, there's
24 one more thing we have to do. In addition to
25 coming up with this distribution, we recognize

1 that NTA film is really not a very good
2 detector, especially for neutrons that might be
3 coming from a reactor where the neutrons are
4 attenuated and they may actually be attenuated
5 down to an energy level that's below the
6 threshold that can be seen by NTA film. So
7 what happened was the -- NIOSH decided that
8 well, we believe that film badge -- NTA film
9 that they had data for really only captured 28
10 percent of the exposure, so they multiplied
11 that distribution by 3.57. Okay? And now they
12 have an adjustment factor that says now we're
13 going to -- to account for the fact that the --
14 the neu-- the NTA film itself has these
15 deficiencies.

16 Now when we look at that, we ask ourselves
17 well, here's where our second -- the antenna go
18 up again. We say to ourselves well, is that --
19 is that good enough. Is there any reason to
20 believe -- you know, they did not have -- as
21 best -- to our knowledge, the actual energy
22 distribution of the neutron flux coming out
23 from these reactors for different locations,
24 different times. So in order to come up with
25 that adjustment factor, you have to have some

1 knowledge of what the energy distribution is of
2 the neutron flux that you're dealing with.
3 Now if it turns out that the vast majority of
4 the neutrons leaving the reactor were below .7
5 MeV, well, you're really not -- for all intents
6 and purposes, you're not going to see anything.
7 So -- and if you don't -- so that becomes an
8 important factor. So when we enter into our
9 dialogue and -- with Jim, you know, we're --
10 we're going to be talking about whether or not
11 that .28 -- or the 2.57 multiplier is a good
12 number or not.
13 Now from previous meetings we heard a lot about
14 well, now -- well, the reality is you can see
15 .3 MeV. I -- I would argue that that's a
16 little misleading. I'll explain why.
17 If the proton in the gel that -- in the film --
18 in the NTA film is moving with .3 MeV, ripping
19 its way through, it'll create enough tracks
20 that you will be able to count a track. But
21 for that proton in the film badge to experience
22 a 3 MeV, it's got to be hit with a billiard
23 board -- ball head-on collision, right square
24 on where a 3 -- .3 MeV neutron crashes like a
25 ball -- like a billiard ball, crashes directly

1 into a proton and delivers that full -- its
2 energy to it and it takes off. If it's a -- if
3 it's a glancing blow, and it turns out only a
4 very, very small percentage of the neut-- of
5 the neutrons that interact with protons are
6 these direct hits, so yes, someone could argue
7 in theory you could see something at .3 MeV if
8 you have a direct, head-on collision, but most
9 of the collisions aren't. So from a practical
10 standpoint, and here's a place where we'll get
11 into a dialogue, our position is well, for all
12 intents and purposes, if you're below .7 MeV
13 you're going to start missing an awful lot.
14 So issue -- you know, the second issue within
15 the -- this -- what I call the neutron-to-
16 photon ratio issue for this time period is can
17 we really -- is -- is it good enough to use the
18 measurements from the seven workers. Second,
19 is the .28 -- 28 percent adjustment factor for
20 NTA film, is that good enough, does it really
21 give -- is -- is it doing justice to the
22 situation really. We'll move on.
23 Let's move on to the N reactor 'cause this is a
24 little later generation. See, those were the
25 earlier reac-- pass -- one-pass reactors. Now

1 we have a closed-loop reactor. Now what
2 happens here is -- we have the same problem.
3 We don't -- we have to come up with what the
4 neutron-to-photon ratio is, but now we're
5 dealing with the N reactor. When -- when all -
6 - when all is said and done, what we found out
7 is well, they basically used the same data, the
8 -- the same information, except they threw one
9 more factor in. They said well, we know we --
10 we believe -- we believe that for the N reactor
11 -- we have all this experience from these
12 single-pass reactors, and we probably need to
13 fix some of the -- the problems we've seen in
14 these other reactors where there was -- there
15 were lots of problems regarding neutron and
16 photon exposures, so there's literature that
17 goes in there -- goes into a description of
18 shielding that's going to be added to this
19 generation of reactor, or to the N reactor.
20 And on the basis of that analysis, a reduction
21 factor I believe of -- a seven-fold reduction
22 factor was applied to the -- to the
23 distribution. Remember the distribution we had
24 before? Well, what they did is said well,
25 whatever that neutron to photon ratio was, the

1 one we had before, we're going to reduce it by
2 a factor of seven because we're going to take
3 credit for the additional shielding that was
4 put in.

5 But one of the things that we found out, and
6 this is a question that we need to discuss, is
7 we don't know if that shielding was ever really
8 installed. They talk about it. There are
9 calculations about it would be nice to have
10 this shielding to correct this problem. But
11 right now one of our questions is was that
12 shielding ever installed, and did it in fact
13 achieve a seven-fold reduction in the neutron-
14 to-photon ratio. Okay? So that's -- that's an
15 issue.

16 Let's go on. Oh, now we're going to -- we're
17 still talking about neutron-to-photon ratios,
18 but now we're going to talk about the plutonium
19 facilities, plutonium finishing facilities in
20 the 200 area. What they -- they took a
21 different tact (sic) here -- okay? -- in the
22 TBD, as we understand it. Post-1972 they had
23 the Hanford multi-purpose dosimeters, which
24 means that they got some really good
25 measurements, neutrons and photons, so you

1 could come up with a good neutron-to-photon
2 ratio. And they did. They said for post-'72
3 data we'll -- we'll take that data and they
4 came up with well, we know what the geometric
5 mean -- the geometric standard deviation for
6 the distribution of the neutron-to-photon
7 ratios are, so now we have a real good handle -
8 - if we know what the photon exposure is, we
9 could use this distribution to get a handle on
10 the neutron exposure. And the -- and the
11 multi-purpose dosimeter captures the full range
12 of energy, so it's a good -- but there are -- I
13 don't want to discount -- we do have some
14 concerns about that, also, but those are what I
15 call second order concerns.
16 Now, the fir-- you'll see that -- our comments
17 on this, we have basically two comments. One
18 is we notice that when they did that work --
19 that is, come up with those ratios from the
20 HMPDs -- they went with a dataset where the
21 measured values were above 20 millirem, but we
22 noticed that the minimum detectable limit was
23 50 millirem, so I'm not quite sure how that,
24 you know, plays out. That is, if -- if they
25 selected set -- datasets that -- where they

1 said -- where -- that these are the -- the
2 HMPDs that we're going to use and they picked -
3 - they selected them based on a cut-off of 20
4 millirem as being a low limit of detection, but
5 the actual low limit of detection for neutrons
6 was 50, I'm not qui-- I'm not quite sure and
7 we're not quite sure what implications that has
8 with respect to that distribution. But that --
9 that, I would say, is a relatively minor issue.
10 The more important issue that we -- we are
11 concerned with is they're taking that ratio now
12 that they obtained from post-1972 data and
13 they're going to apply that ratio to pre-'72.
14 Okay? That sounds reasonable, everything else
15 being the same that's a reasonable thing to do.
16 But we have reason to believe that everything
17 else wasn't the same. That is, in the earlier
18 years there -- there's literature that says
19 that -- that there was a lot more hands-on
20 operations. In addition, there was a lot of
21 additional shielding installed. So the
22 question becomes the distribution of values,
23 the neutron-to-photon ratios that we see post-
24 '72, is it appropriately applied to pre-'72
25 without any adjustments to take into

1 consideration some design and operational
2 changes that occurred.

3 Okay, that covers the neutron issues, and I
4 would imagine the -- we will be having
5 meetings, and we're going to be talking about
6 it. But it's really clean. I mean the issues
7 -- you know, the areas where we have our
8 concerns, there's -- are something you can sink
9 your teeth into so I'm expecting that when we
10 do engage in this process what we'll -- we'll -
11 -

12 **DR. ZIEMER:** John, before you leave the
13 neutrons, I'm a little surprised -- I don't
14 know if you or Jim can speak to this, but if
15 you'd asked me just out of the blue, I would
16 have guessed that the Hanford folks had
17 spectral data in workplace for neutrons. Did
18 they not have spectral data? 'Cause I would
19 have thought the practice was that they would
20 take the spectral data and then have a
21 calibration factor against either the NTA film
22 or whatever they're using to -- to go from
23 whatever the film detected to dose. Is there
24 no evidence of spectral data in the workplace
25 for these various reactors?

1 **DR. BEHLING:** I think that's explained in our
2 TBD review, and the 28 percent or the 3.52
3 correction factor actually used a tissue
4 equivalent proportional counter as a reference
5 value to NTA film. In other words, take the
6 tissue equivalent proportional counter in a
7 given facility, measure its dose or integrated
8 dose over a period of time and compare that to
9 NTA film, and that's where the 28 percent
10 correction factor comes into play. At least
11 that was the way I interpreted it when I read
12 the TBD and -- and therefore the issue of --

13 **DR. ZIEMER:** That would have been specific for
14 a particular facility then.

15 **DR. BEHLING:** Well, it is specific for the
16 eight single-pass reactors that were identified
17 in one of the slides that John showed where you
18 had the seven workers and there were the five
19 methods --

20 **DR. ZIEMER:** Okay, so that's where that came
21 from.

22 **DR. BEHLING:** Yes, and it's --

23 **DR. ZIEMER:** Okay.

24 **DR. BEHLING:** -- it's really not based on
25 spectral analysis, but comparing one NTA film

1 against the tissue equivalent proportional
2 counter.

3 **DR. ZIEMER:** Okay. Sort of indirectly that is
4 a spectral --

5 **DR. BEHLING:** Yes.

6 **DR. ZIEMER:** -- analysis. Jim, do you -- add
7 to that or...

8 **DR. NETON:** No, I think Hans -- Hans has
9 addressed the issue.

10 **DR. BEHLING:** Good.

11 **DR. NETON:** I just -- there's a couple of
12 things with neutrons, though, I'd like to point
13 out. One I think this issue of sodium 24, that
14 doesn't necessarily mean it was an activation
15 product in the body. There was actually sodium
16 24 in the drinking water.

17 **DR. MAURO:** In the drinking water?

18 **DR. NETON:** Yeah, I think so. That -- that's
19 not very good evidence --

20 **DR. MAURO:** Okay.

21 **DR. NETON:** -- at all.

22 **DR. ZIEMER:** Could be, yeah.

23 **DR. NETON:** And the second issue I think is
24 when you were talking about these detection
25 limits, you've got to remember you're doing --

1 you're generating distributions. And as we've
2 talked about many times, when you're generating
3 a lognormal distribution, the detection limit
4 really is not relevant as long as you're rank
5 ordering doing cumulative probability plots,
6 you can still pick off the 50th percentile in
7 the geometric standard deviation. So whether
8 it was 20 or 40 is not really a central issue,
9 I don't think.

10 **DR. ZIEMER:** Yeah.

11 **DR. NETON:** If you're doing geometric --

12 **DR. ZIEMER:** Yeah.

13 **DR. NETON:** -- if you're doing lognormal
14 distributions, the detection limit is not
15 really relevant.

16 **DR. ZIEMER:** Well, these are items of course --

17 **DR. NETON:** For generating lognormal
18 distributions.

19 **DR. ZIEMER:** -- that'll come out in the --

20 **DR. NETON:** We can talk about these --

21 **DR. ZIEMER:** -- in the exchange --

22 **DR. NETON:** -- technical issues, I just wanted
23 to point out...

24 **DR. ZIEMER:** -- it just -- I was just struck,
25 as you --

1 **DR. NETON:** Okay.

2 **DR. ZIEMER:** -- went on there that it seemed to
3 imply that they had no spectral information and
4 it astounded me because I know who some of
5 those HPs were there in the early days and I
6 was just certain that it existed somewhere.

7 **DR. MAURO:** Okay.

8 **DR. ZIEMER:** Okay.

9 **DR. BEHLING:** Just another comment that I guess
10 could have been added in John's presentation
11 and that is the issue of the seven workers and
12 the five methods were basically derived on the
13 basis of NTA film. And I think there's a
14 certain paradox to that because in one instance
15 we say that NTA film was not reliable to
16 monitor people, but at the same time we're
17 saying it's good enough to measure neutron-to-
18 photon ratios. So one should also keep that in
19 mind when you look at the pedigree or the
20 reliability of establishing these five methods
21 and deriving from that the neutron-to-photon
22 ratio.

23 **DR. ZIEMER:** Thank you. Thank you, John. Go
24 ahead.

25 **DR. MAURO:** Okay. We're going to move on to

1 internal dose, and this sort of presents an
2 overview of the issues related to internal
3 dose, but we're going to get into a little bit
4 more detail in the next few slides.

5 I guess the -- from a priority point of view,
6 recycled uranium is raising its head again, as
7 it always does, as being an issue, the ade-- or
8 the ability to fully appreciate what the
9 internal exposures may have been to recycled
10 uranium. We're talking about thousands of
11 workers that processed and handled RU, and
12 there are default values used in the site
13 profile, and I guess the bottom line is can we
14 hang our hat on those ratios -- that is -- and
15 I think some work needs to be done and a
16 dialogue engaged on whether or not the default
17 values -- not -- capture the full distribution
18 of recycled uranium and the trace levels of
19 plutonium and americium and neptunium in a way
20 that accounts for the uncertainties.

21 Bear in mind that it really is not until 1988
22 when you have alpha spectrometry on neu-- so
23 prior to 1988 when we -- get into that right
24 now, you've got yourself a situation where you
25 really don't have great data, great bioassay

1 data upon which to get a full appreciation of
2 what the intakes were of these various
3 radionuclides. And so the neutron -- so the
4 recycled uranium is one issue.
5 But then there are all of these what I guess we
6 call special campaigns. As we read through the
7 supporting literature we find out that there
8 was an awful lot of experimental work going on.
9 One of course that was mentioned over and over
10 again is the use of uranium-233 as fissile
11 material, and its associated uranium-232. We
12 also have come across that apparently there
13 were -- experimental work being done where
14 there was large quantities of cobalt-60,
15 carbon-14, yttrium, polonium-210. So what I am
16 getting at is that there's a richness of mix of
17 radionuclides that have occurred at different
18 places at different times that right now we're
19 un-- we're not completely convinced that it's
20 been aired and the uncertainties aired
21 adequately in the TBD. I think this is a
22 subject that we need to engage and discuss how
23 well are we able to track and reconstruct doses
24 to these categories of workers. Can we
25 identify these categories of workers that may

1 have experienced these exposures, how extensive
2 it was and can we get a handle on it as to --
3 and in many respects it's like trying to trace
4 down some of the issues we had when we were
5 talking about Mallinckrodt. There were other
6 radionuclides. There were other -- that I
7 think -- that is not fully captured in the TBD
8 and we -- and we'd like to engage NIOSH in a
9 conversation regarding that.

10 Now, given that you have this uncertainty
11 regarding what in fact was the internal
12 exposures, we -- you take a close look at what
13 was actually done. What is -- what are the
14 instructions given to -- to the dose
15 reconstructors and how -- how well do those
16 instructions hold up. Now when you don't have
17 any bioassay data available -- that's the
18 question. I mean if you have bioassay data
19 available and you can trust it and it's
20 complete, great. But when you don't have any
21 bioassay data available, that's when you have
22 to start to use surrogate approaches.

23 Now in the TBD they basically cover three
24 different time periods. Say well, from 1943 to
25 1946, before there was any bioassay data, what

1 we're going to assume, there's reason to
2 believe that a worker may have experienced some
3 internal exposure -- entered an area with
4 airborne activity, what we're going to do --
5 and on face value this sounds like a very
6 reasonable and claimant-favorable approach --
7 for that time period -- we do know that if the
8 levels were above a given quantity in terms of
9 dpm per cubic meter, respiratory protection was
10 used. So you know what -- what's going to be --
11 - what's -- their -- decided to do is say what
12 we'll assume is that anyone that had a
13 potential to be exposed to airborne activity in
14 that time frame, '43 to '46, we will assume
15 that he experienced exposures whereby the
16 distribution of the airborne radioactivity had
17 a triangular distribution that went from zero
18 to a mode which -- which was the level that was
19 required for respiratory protection to twice
20 that, and that he went in there without
21 respiratory protection. So that was the sort
22 of the fall-back position. When we don't have
23 any information, we'll just make that
24 assumption.
25 Then from 1947 to 1952 they changed the

1 approach a little bit and they said what we're
2 going to do is we'll simply assume that when a
3 person does enter an area that -- where he may
4 have received some internal exposure, we'll
5 assume he's at ten percent of the level that
6 you're required to wear respiratory protection.
7 And finally, from '53 to '88 -- '88 is an
8 important date because that's when they went to
9 alpha spectrometry on the urinalysis so you got
10 a good handle, but you had to fill it in from
11 1953 to '88. What they simply assumed was that
12 if a person enters such an area they were at
13 the -- ten percent of the allowable limiting
14 concentration for either strontium-90 or
15 plutonium-239. So this becomes the one-size-
16 fits-all.

17 Now -- and I have to say, as a health physicist
18 looking at that, say you know, that's a pretty
19 conservative set of assumptions to -- you know,
20 to come at the problem that way, saying that
21 everyone, you know, is -- that had any
22 potential to be exposed to airborne activity.
23 But then -- then you have to think about it a
24 little bit. At that time, when they were
25 taking those air samples, were they in a

1 position to make a good -- a reliable judgment
2 of -- that in fact the levels were at some
3 fraction of the allowable limit, especially
4 considering the fact that a full appreciation
5 of this full array of radionuclides that we're
6 dealing with was not disclosed. So were the --
7 here's the question that we need to talk to
8 NIOSH about. The data that was available to
9 the health physicists in 1943 to 1946 time
10 frame, did that put them in a position that
11 they had a good control over the situation
12 where they knew that in fact -- whether or not
13 there was a problem or not, especially when we
14 talked about other issues, the breathing zone
15 versus general air samples. As you recall,
16 there could be a ten-fold difference there.
17 So there -- there are issues related to the
18 adequacy of the knowledge at the time of the --
19 regarding the air samples to be able to make
20 that judgment whether you needed -- whether or
21 not we had a problem in an area or not.
22 Now what confounds this further, and this is
23 item number two under SC&A comments, is
24 confirmation of the adequacy of these
25 assumptions is very limited because there was

1 abso-- there was no bioassay program from '43
2 to '46, according to the TBD and the supporting
3 literature. Bioassay started for plutonium in
4 '46, for uranium and fission products in '47,
5 and by late 1960 there were -- they were --
6 they were doing some more advanced bioassay
7 studies, but it wasn't until '83 -- not '84,
8 '83 -- that we had an alpha spec. So the
9 question becomes does this one size fit all for
10 a way of filling in this incredible gap. For
11 internal exposure, is it adequate. And that's
12 a question that we'd like to discuss with --
13 with NIOSH.

14 This is the last slide. There are a number of
15 other issues that -- that we call the lesser
16 issues, but nevertheless issues that we don't
17 want to lose track of. One is something that
18 we talk about quite a bit that might right now
19 have been solved. We found when we read the
20 TBD that there was some ambiguity on the
21 instructions on how do you interpret the data
22 that you have, the bioassay -- not bioassay,
23 the film badge data or the TLD data. How do
24 you assign uncertainties. And this goes back
25 to discussions that Kathy Behling and Hans had

1 regarding confusion, because in many cases we
2 found -- I use the word impenetrable, the
3 information is so complex that we fou-- we are
4 finding that the folks that are actually doing
5 the dose reconstructions are very often
6 confused. But now that we have the workbooks,
7 we think a lot -- that might -- the problem
8 might have gone away.

9 There are these oth-- there -- there are issues
10 that we -- we notice that -- not -- there was
11 not a great deal of attention given to
12 extremity dose, skin dose, gonad, breast, to
13 the -- you know, the beta emitters and the weak
14 photons in the TBD. We'd like to engage a
15 little bit more and learn a little bit more
16 about how you deal with that.

17 There was also -- we noticed that for
18 environmental exposure -- this was an
19 interesting observation, but it's not -- I
20 don't think it has a big effect on doses. And
21 you -- visualize you've got these emissions
22 coming from the various release points in the
23 plant and you've got workers -- unmonitored
24 workers outdoors. And you want to try to put
25 an upper bound on the exposures that those

1 workers may have experienced. Well, what they
2 use is they took the source term information
3 that I believe came out of some of the dose
4 reconstruction work and they applied
5 atmospheric dispersion factors using a computer
6 program called RATCHET, which is a very good
7 program and it does what's called puff
8 invection modeling. But we noticed that they
9 didn't use the puff invection feature. They
10 just used as average annual (unintelligible).
11 So we -- we think that there's room for
12 improvement on how to do that kind of analysis.
13 And finally -- and I don't want to give it
14 short rift (sic), but I realize I'm taking up a
15 lot of time, we felt that there's more analysis
16 -- more discussion is needed of exposures
17 associated with the tank farms. More
18 discussion is needed with regard to exposures
19 during D and D operations, which was quite
20 extensive. And finally, there were an awful
21 lot of incidents that occurred, and there
22 really is very little -- there's guidance in --
23 and this is a recurring theme. You know, right
24 now we're depending on the CATI interviews to
25 lead us toward whether or not a given worker

1 may have experienced an exposure from an
2 incident. It seems that a little bit -- more
3 needs to be said for guidance to the dose
4 reconstructor regarding incidents and making
5 sure that -- that they don't miss an exposure
6 from an incident.

7 And I think that concludes my presentation.

8 **DR. ZIEMER:** Okay. Thank you, John. Board
9 members, do you have questions for John at this
10 time? Wanda.

11 **MS. MUNN:** Just a couple of comments rather
12 than questions. Thank you, John, for a very
13 good presentation on an extremely weighty site
14 profile. It is a hard document to get through,
15 and I'm pleased to see that you've refined the
16 issues to things that I think probably you and
17 NIOSH can ultimately work down to only one or
18 two major issues for addressing. It strikes me
19 that the work that both NIOSH and you are doing
20 in this regard is based on the work of the men
21 and women who established health physics
22 programs at this site during those early years,
23 and were -- I think we're fortunate at the
24 Hanford site to have had a continuum of record-
25 keeping that made it possible for a depth of

1 information that isn't perhaps available on all
2 other sites to be accessible to you.

3 I don't want personally to comment on any of
4 these issues until after there has been more of
5 a dialogue between NIOSH and SC&A. This is the
6 first time I have seen this -- this
7 information. I don't even have the hard copy
8 yet. I assume we will get hard copies. Right?

9 **DR. MAURO:** Of the matrix or of the report?

10 **MS. MUNN:** No, we have the matrix.

11 **DR. MAURO:** Oh, the -- the -- I put 20 copies
12 out. I should have put out more. They're --
13 they're all -- they're all gone.

14 **MS. MUNN:** Okay.

15 **DR. MAURO:** I have -- we can make up more.

16 **MS. MUNN:** Fine.

17 **DR. ZIEMER:** I don't think we got copies, did
18 we?

19 **MS. MUNN:** Huh-uh. Thank you.

20 **DR. ZIEMER:** Okay, we need to get copies.

21 Okay, thank you.

22 Let's see, Jim, do you have any comments at
23 this time you want to make on --

24 **DR. NETON:** No, I'd like to thank John for a
25 very -- very concise presentation. You know,

1 we -- I'm glad that we've been able to condense
2 a 290-page review down into something that's a
3 little more digestible. We look forward to
4 working with -- with SC&A on this. We have
5 just seen these issues raised today. I mean we
6 knew they were in there, but they were in the
7 291 pages and I'm glad we're focusing on these
8 and, through the workgroup process, I assume
9 that we'll get together and come to some
10 resolution.

11 **DR. ZIEMER:** Lew, can you inform us on --
12 timetable-wise, what we're -- where we need to
13 be on this in terms of target times?

14 **DR. WADE:** Well, I think the driver is that,
15 you know, we've had -- this is one of the first
16 reviews we've commissioned. I think it's --
17 it's been in the process of getting to the
18 Board, so I think there's an urgency that comes
19 from that. I know of no other urgency, but I
20 think it's important that we resolve these
21 issues as quickly as possible.

22 **DR. ZIEMER:** I'm trying to get a feel for the
23 extent to which -- in the context of the
24 Pacific Proving Grounds SEC and the Rocky Flats
25 SEC, that we'll be in a position to -- to act

1 on this in the next couple of months.

2 **UNIDENTIFIED:** (Off microphone)

3 (Unintelligible)

4 **UNIDENTIFIED:** (Off microphone)

5 (Unintelligible)

6 **DR. ZIEMER:** And Y-12 of course, yes.

7 **DR. WADE:** I think we need to -- from my
8 perspective, I think we need to get NIOSH and
9 SC&A together, the sooner the better, to try
10 and deal with these issues. I assume we're
11 going to have a Board member or two present --

12 **DR. ZIEMER:** Yes.

13 **DR. WADE:** -- when that happens. I think that
14 would probably grow into a working group, so
15 you know, I think there are things we can do.

16 **DR. ZIEMER:** Okay. Mark.

17 **MR. GRIFFON:** I guess that would lead into my
18 next que-- I mean this is not really a Hanford
19 question, but it's a -- just a question about
20 the upcoming workload and -- for -- for NIOSH,
21 for SC&A, as well as the workgroup -- Board.
22 I'm thinking about Rocky Flats, Y-12 and PPG.

23 **DR. ZIEMER:** That's what I just mentioned.

24 **MR. GRIFFON:** And you know, a couple things
25 that I -- I wanted to ask about -- we're in the

1 middle of the Y-12 site profile review and we
2 were talking on the side here about this CD
3 with the 6,000 pages, and I guess the question
4 that arises in our mind for -- with the limited
5 time frame coming up or -- or at least we're
6 trying to come to some conclusions as quick as
7 we can on this, we -- we were just having a
8 discussion of how best to proceed with
9 reviewing the material on that -- on that CD.
10 I guess the concern is that it may take NIOSH
11 several weeks to -- to digest this, get it in a
12 database format and then turn it over to SC&A.
13 So I guess I just wanted to maybe discuss that
14 as a -- it could be a separate task entirely
15 that -- that we might want SC&A to, you know,
16 sort of be gleaning this data in parallel with
17 -- with NIOSH instead of in series, you know.
18 So it's just something that came up, and the
19 other thing that we haven't really yet -- we
20 mentioned that NIOSH should get together with
21 DTRA and -- and discuss the PPG issue. We did
22 ask that Board members be involved. I wonder
23 if we need to have an SC&A presence there, too,
24 or -- or are we going to task SC&A with
25 assisting us in that review. And that doesn't

1 seem like it would be a lengthy item, but it
2 could be a time-sensitive item, certainly, and
3 it may involve -- I hope not, but it may
4 involve our classi-- you know, classifying
5 groupings or meetings or whatever, so --

6 **DR. ZIEMER:** Okay.

7 **MR. GRIFFON:** -- just -- just a few --

8 **DR. ZIEMER:** Okay, well --

9 **MR. GRIFFON:** -- things to think about.

10 **DR. ZIEMER:** -- for now, let's cogitate on
11 that. We can revisit it tomorrow if you want
12 formal action. But the point is that there are
13 a number of issues that are quite pressing. It
14 may be three or four weeks before NIOSH has a
15 chance even to react to this in a formal way.
16 I'm just trying to get a feel for whether or
17 not we need to formalize any process for the
18 Board at this point until that occurs, and then
19 perhaps at our phone meeting see where they are
20 on that and determine whether we need to set up
21 a workgroup at that point.

22 **DR. WADE:** Well, I gue--

23 **MR. GRIFFON:** Yeah, I think Lew said it best,
24 that -- that -- let NIOSH and SC&A talk, and
25 then it may -- it eventually will evolve into a

1 workgroup function I think. Right?

2 **DR. WADE:** I would like to think that it'd be
3 an interaction. Now whether you want that
4 interaction to take place with a Board member
5 present on the phone call, that's your choice.
6 But I think there's an opportunity to start to
7 make some ground on the Hanford issues and I'd
8 like to see us take that opportunity.

9 **DR. ZIEMER:** I think based on past experience,
10 the Board's preference is to at least have
11 someone present at these, and we can so assign,
12 if we know when -- when the exchanges will take
13 place. And then, again, as has been the
14 process to copy the Board on e-mail exchanges
15 that occur on issues of this type. Is that
16 suitable?

17 **DR. WADE:** It's fine for me.

18 **DR. ZIEMER:** Yeah.

19 **DR. WADE:** Would it be best to identify a Board
20 member now or do we want to do that -- think
21 about that this evening and talk about it
22 tomorrow?

23 **DR. ZIEMER:** Let's talk about it tomorrow.

24 **DR. WADE:** We have some new members, too, so --

25 **DR. ZIEMER:** Right, an opportunity to chat with

1 different ones. Okay.

2 **DR. NETON:** I'd like to suggest -- in the past
3 what we've done is to provide NIOSH a chance to
4 react to these -- you know, these more refined
5 comments and -- and maybe just engage in a
6 technical discussion where need be with SC&A --
7 I mean a Board member would certainly be
8 invited to attend, but not necessarily present
9 because these would be at a sort of -- fairly
10 detailed technical level. As John was talking
11 today I could see we're going to get down into
12 the weeds on these issues and -- and SC&A in
13 the past has been pretty good about preparing
14 minutes of those discussions that would be
15 available to the Board.

16 **DR. ZIEMER:** Right.

17 **DR. NETON:** And then at least we could get some
18 rough draft responses from NIOSH fleshed out
19 and available for further discussion.

20 **DR. ZIEMER:** Right. That certainly has worked
21 well in the past, and no reason not to continue
22 that -- that mode of operation. It doesn't
23 preclude these early exchanges just between the
24 two of you.

25 **DR. WADE:** And so then we might have some

1 interaction between NIOSH and SC&A on these
2 issues to try and -- a clarifying call, the
3 first step, and we would -- we would ask SC&A
4 then to see that there was a transcript of
5 those interactions and a summary provided to
6 the Board. I think that gives us --

7 **DR. ZIEMER:** Right.

8 **DR. WADE:** -- a step we can take.

9 **DR. ZIEMER:** Good. Okay. We're going to go
10 ahead and take a break at this time. We have a
11 15-minute break scheduled and then we will
12 resume at that point. Thank you.

13 (Whereupon, a recess was taken from 3:20 p.m.
14 to 3:40 p.m.)

REPORT FROM SC&A ON SEC TASK
DR. ARJUN MAKHIJANI, SC&A

15 **DR. ZIEMER:** We are ready to proceed in the
16 next item on our agenda. Now if -- if you
17 would look at your agenda a moment, you'll
18 notice that there is an item called "Procedures
19 for Board Evaluation of SEC Petitions", and
20 then you'll see after that "Report from SCA on
21 an SEC Task". What the Board would like to do
22 is reverse the order of those two. The Board
23 would like to hear the SE-- or hear the SC&A
24 report before it holds its own discussion on

1 the SEC procedure so that we can use the SCA --
2 don't you like these acronyms -- so we can use
3 the SCA information to inform our discussion of
4 our own SEC procedures.

5 So what that amounts to is the following, that
6 -- the Board has recently developed what we
7 call Task Five, which is a newer task for our
8 contractor which allows our contractor to get
9 involved in assisting us in various aspects of
10 Special Exposure Cohort reviews.

11 Under that task there were two initial subtasks
12 that were assigned to the contractor. The
13 first of those, subtask one, was to ask the
14 contractor to review the procedures used by
15 NIOSH and by NIOSH's contractor, ORAU, on the
16 SEC evaluation process. So we have that report
17 that we've received from SEC (sic). And Board
18 members, that -- the report itself -- dated
19 November 23rd, and there is a copy in your
20 notebook.

21 And then subtask two where we asked the
22 contractor to give us its thoughts on how the
23 Board itself should proceed in handling SEC
24 petitions, what our procedures should be. And
25 of course parallel to that you recognize that

1 the Board has had its own working group that
2 has developed some SEC criteria by which we
3 will evaluate SEC petitions. So these things
4 have been going on simultaneously. That
5 subtask two report we received on November --
6 or it was dated November 30th, so Board members
7 have had this also for several weeks, and a
8 copy is in the notebook. And I believe copies
9 of all of these are also on the table.

10 Dr. Makhijani from SC&A is going to give us a
11 presentation now on both the subtask one and
12 subtask two findings of our contractor, so
13 Arjun...

14 **DR. MAKHIJANI:** Thank you, Dr. Ziemer. I'll go
15 through the evaluation of NIOSH procedures
16 first. Of course we looked at the rule, 42 CFR
17 83, and the main procedure's in OCAS PR-004.
18 There are a couple of forms, Form A and Form B,
19 which prospective petitioners would use to file
20 the petitions. We reviewed those, and the
21 procedure makes reference to using OCAS IG-001
22 and 2, which are the external and internal dose
23 procedures for use in SEC petition evaluation.
24 So those were the basic documents that we
25 reviewed. The OCAS documents were -- 001 and 2

1 -- just mainly we relied on the prior
2 evaluations.

3 Let's see, okay. So some strengths were noted
4 for the procedures. There is a logical, step-
5 by-step procedure that is set forth by NIOSH,
6 and it allows NIOSH to divide the proposed
7 class into sub-classes, and that has happened
8 before. It allows, in the more easy cases,
9 when SECs are to be designated for a certain
10 sub-class at least to be early designated, as
11 happened at Mallinckrodt, for instance,
12 provides some useful examples. And then it
13 also provides for a dose reconstruction for
14 non-SEC cancers.

15 One of the bigger findings was that it doesn't
16 -- the NIOSH procedures currently don't contain
17 detailed guidance on how to calculate maximum
18 dose. I noticed that Dr. Neton made some
19 reference to this earlier in his presentation
20 on Pacific Proving Grounds. This -- this
21 became something of an item in Iowa, to which
22 Dr. Neton also made reference this morning.
23 It's because -- we're calculating a maximum
24 dose with plausible assumptions, and those
25 terms need to be defined in terms of -- not in

1 terms of actually putting numbers on a maximum
2 dose, which would vary from site to site and
3 job type to job type and so on, but defining
4 some criteria where there -- where maximum
5 doses might be considered reasonable so that
6 the maximum doses don't become arbitrary. And
7 we believe that some -- some guidelines along
8 the lines of actually discussing job
9 categories, evaluation of data integrity, how
10 dose estimation for unmonitored workers might
11 work -- this might be helpful in defining the
12 limits for what might be considered, you know,
13 a scientifically reliable maximum dose rather
14 than an arbitrarily high maximum dose.
15 One of the most important and difficult points
16 was what is the relationship of 42 CFR 83 under
17 which maximum doses are calculated with
18 plausible assumptions to the highest doses
19 under worst-case assumptions under 42 CFR 82.
20 Now under the individual dose rule, 42 CFR 82,
21 the highest doses are not supposed to involve
22 uncertainty. And the way we understand that is
23 when NIOSH declares that a certain number is,
24 under scientifically-reasonable worst-case
25 assumptions, regarded as a maximum dose, that -

1 - that that is the maximum dose, which is used
2 only for denial.

3 Under 42 CFR 83, if an SEC petition is denied
4 on the ground that maximum dose with plausible
5 assumptions can be calculated, that dose could
6 be used to compensate people. And the rule is
7 silent and -- and the guidelines are also
8 silent on the question of the relationship
9 between these two kinds of maximum dose. And
10 we believe that because the maximum dose under
11 42 CFR 83 methods could be used to compensate,
12 as well as deny, that should not wind up being
13 higher than the highest worst-case assumption
14 dose that will involve no uncertainty under 42
15 CFR 83.

16 That -- we've suggested that an uncertainty
17 which requires that the worst-case dose under
18 42 CFR 82 always be higher than the maximum
19 dose under 42 CFR 83 would clarify what is now
20 a problem, at least in theory. And this did
21 come up, indirectly but not in a specific
22 example, at Mallinckrodt where we did raise the
23 issue in a site profile review, that some of
24 these doses had the potential to wind up being
25 higher than calculated worst-case doses for --

1 for that site.

2 This was a theme regarding survivor claimants

3 that came up in our review of interview

4 procedures under 42 CFR 83. Now NIOSH does

5 have provision for working with petitioners

6 quite extensively and helping them prepare the

7 petition so that they qualify after a petition

8 is submitted. But we continue to feel that

9 survivor claimants may have great difficult--

10 who want to become petitioners or -- or

11 survivors who are not claimants who may want to

12 become petitioners, may have a particularly

13 difficult time and -- and some -- to level the

14 playing field, some special assistance does

15 need to be provided for in terms of incidents,

16 in terms of working conditions of the plant,

17 perhaps explaining the site profiles and -- and

18 things like that to prospective petitioners.

19 And -- and you know, post-petition there is

20 assistance, and we haven't evaluated any

21 detailed case study on that, but pre-petition

22 at least some -- some more level playing field

23 would appear to be called for for survivor

24 claimants who want to become petitioners.

25 We listed some other concerns. Currently NIOSH

1 does provide for a interview with petitioners,
2 but it's not required as part of the
3 guidelines, and we think that a detailed
4 interview with the -- with at least one of the
5 petitioners is very important and should be
6 required as part of the guidelines. It might
7 obviate misunderstandings and difficulties and
8 -- and if -- if an SEC petition is denied, it
9 might make it easier for the petitioner to
10 understand the basis of it if an interview had
11 been conducted, and NIOSH might also receive
12 more clarity as to where the petitioners were
13 coming from in that regard.

14 There -- there is the -- the guidelines, as
15 well as the rule, do say that the -- some data
16 from the site should be used as a starting
17 point, and provide some of the basis for -- for
18 maximum dose estimation, or dose estimation,
19 with sufficient accuracy. But this is -- how
20 much is adequate, what kind of data can be used
21 from other sites, how it would be married, I
22 think -- I think -- we think that the
23 guidelines could use some examples, at least,
24 based on -- on -- on the work that NIOSH has
25 done so that it's a little more clear. We

1 realize that the rule was written
2 prospectively, but now there's -- there's a
3 great deal of experience with SEC evaluation,
4 so many of these things are not necessarily
5 criticisms of the guidelines as they were
6 issued when they were issued, but with -- with
7 some hindsight, perhaps the process might be
8 smoother if -- if the guidelines did -- did
9 have some clarification based on the experience
10 that had been gained.

11 The last issue related to health endangerment.
12 This came up this morning in regard to the
13 workers who worked less than 250 days. The
14 example that's in the rule and in the
15 guidelines in regard to the external
16 criticality accidents certainly provides an
17 example of where there would be an endangerment
18 in regard to an incident. There's no
19 corresponding example for internal dose.
20 Certainly there have been circumstances at
21 various sites like Mallinckrodt and others
22 where one might imagine doses -- and one can
23 calculate doses based on available data, I
24 believe -- in periods shorter than 250 days
25 that might be comparable in health endangerment

1 to other places where NIOSH has declared health
2 endangered for more than 250 days of work. And
3 I think in the case of internal dose, the
4 guidelines are rather silent, and -- and there
5 is no corresponding clarification about what
6 the process is for people who are primarily
7 exposed to internal dose and how to proceed for
8 workers who worked for less than 250 days.
9 And then we have some suggestions for
10 improvement that are based primarily on -- on
11 the findings, which I won't go through. You
12 can look at the list, and they correspond to
13 the findings I've just gone through.
14 So that's the review of the guidelines, so
15 perhaps --

16 **DR. ZIEMER:** Let's pause a minute and see if
17 any of the Board members have questions or
18 comments on this material.

19 (No responses)

20 Okay, let's proceed.

21 **UNIDENTIFIED:** (Off microphone) Jim -- Jim
22 might have a comment.

23 **DR. ZIEMER:** Oh, Jim, please.

24 **DR. NETON:** Are we ready? I --

25 **DR. ZIEMER:** Oh, sure, yeah, go ahead.

1 establishes the fact that we need to be able to
2 establish a maximum dose with plausible
3 assumptions in order to deny a class. If we
4 can -- if we can establish a maximum dose under
5 plausible circumstances, then the class could
6 be denied. That would be a basis for denying
7 the class. That's the way the regulation
8 reads, at least in our mind.

9 Now, if that's the case, that does not mean
10 that when we -- if the -- if the class were
11 denied, that we would necessarily use that
12 maximum dose to do dose reconstructions under
13 42 CFR 82. We're not required to. That would
14 just be a bounding, plausible analysis to
15 demonstrate that yes, we can indeed put some
16 plausible upper limit.

17 When it comes to doing dose reconstructions, if
18 there is a more refined method available at the
19 time or becomes available, we can refine it and
20 use a better estimate. In some situations,
21 though, it may be that we will have no
22 additional information. The maximum plausible
23 dose that was used to deny the class will be--
24 could become the best estimate. It's no longer
25 at that point a maximum dose. It's the best

1 estimate that we ever feel that we could come
2 up with.

3 So I think that might clear up some confusion
4 because it -- they're two totally different
5 concepts. The maximum plausible dose for SEC
6 petition analysis is very different than the
7 maximum dose that we use in the efficiency
8 process to deny cases.

9 **DR. ZIEMER:** Jim, I thought that Arjun was
10 suggesting that when you went back and did the
11 actual dose reconstruction you might come up
12 with yet a higher number. Was that the ca--
13 no.

14 **DR. MAKHIJANI:** Dr. Ziemer, the point of -- of
15 this finding is that whatever the terminology,
16 when you go back to 42 CFR 82, after denying a
17 petition, and you've developed a method --
18 presuming you don't have more information and
19 so on -- and we take the case of Mallinckrodt.
20 A certain plausible dose method was developed,
21 and if that had been denied and you didn't have
22 more information, you would then have proceeded
23 to calculate doses by that method to compensate
24 or deny people, depending on POC.

25 Now the concern here is that that number -- now

1 at Mallinckrodt some cases had actually been
2 denied using a different approach that was
3 called highest dose with worst-case
4 assumptions. Now at that point it should not
5 be the doses that are being used to compensate
6 people -- to deny people should have been less
7 than doses that are being used to compensate
8 people. And the point of this comment is that
9 there should be some restriction in going from
10 the SEC rule after denial as to how those cases
11 are handled. And we do recognize that there's
12 a distinction between the terms.

13 **MR. GRIFFON:** (Off microphone) (Unintelligible)
14 it's more of a having to go back to those cases
15 and reassess (unintelligible) --

16 **DR. NETON:** Well -- well, right, but I mean --
17 I think what -- this -- this could happen very
18 frequently where we would use worst-case
19 assumptions to deny cases under 42 CFR 82
20 because it's expeditious and it gives the
21 claimants an answer fairly quickly, while we're
22 continuing to do more research to refine our
23 ability to do dose reconstructions. At the end
24 of the day, if NIOSH finds no more information
25 other than that worst-case assumption and it's

1 a plausible worst-case assumption, it could in
2 effect then become the best estimate for those
3 dose reconstructions and then could be used to
4 compensate cases. It's no longer a worst-case
5 assumption; it's our best estimate.

6 There's sort of a nomenclature issue here, I
7 think. Our -- 42 CFR 82 allows us to do best
8 estimates, and if the best estimate is a worst-
9 case assumption, it -- that's what it is. So
10 it depends on how much research we can
11 accomplish --

12 **MR. GRIFFON:** (Off microphone) (Unintelligible)
13 I think we're really there, from
14 (unintelligible).

15 **DR. NETON:** Okay.

16 **MR. GRIFFON:** (Off microphone) (Unintelligible)
17 I mean I think, you know, it's the question of
18 if you end up using the maximum plausible dose
19 to actually -- you -- you can't do any better
20 estimate --

21 **DR. NETON:** Right.

22 **MR. GRIFFON:** -- and you have to apply it, and
23 you look back and you say oh, these previous
24 cases we used a maximum but it wasn't as high
25 as this maximum now, then you have to -- you

1 know, so --

2 **DR. NETON:** Wait, wait, wait --

3 **MR. GRIFFON:** -- I think that's what Arjun's
4 saying, isn't it, that you have to go back and
5 reassess those cases if they were denied based
6 on --

7 **DR. NETON:** A maximum plausible -- a maximum
8 plausible dose under the SEC process is totally
9 different from the maximum plausible dose under
10 42 CFR 82, or could be.

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

12 **DR. NETON:** It could be the same --

13 **DR. ZIEMER:** But it could be the same --

14 **DR. NETON:** -- but (unintelligible).

15 **DR. ZIEMER:** -- in the case you mentioned.

16 **DR. NETON:** Yeah, all we have to do is
17 establish that a maximum plausible for SEC
18 petitions is -- can be done. But when we go to
19 do the analysis, we don't -- we would do a best
20 estimate. If the best estimate is equal to the
21 maximum plausible estimate, then it -- it's
22 totally legitimate within the requirements of
23 42 CFR 82 to use that. So I don't see that
24 there is a disconnect.

25 **DR. MAKHIJANI:** (Off microphone)

1 (Unintelligible) (on microphone) to clarify the
2 comment. Under 42 CFR 82, as I understand it,
3 there's a certain kind of dose which is to be
4 used only for denial. That's the kind of dose,
5 when you wind up above 50 percent, NIOSH and
6 ORAU actually go back and recalculate a better
7 estimate, if they can. And the worst-case
8 assumptions efficiency procedure is used only
9 for denial.

10 This finding is directed only at that kind of
11 dose, that that kind of dose, which is -- which
12 it is said in the rule will not involve
13 uncertainty -- should truly be the highest
14 number you could come up with under any dose
15 reconstruction procedure because it's the
16 highest dose that is promised to the public
17 will not involve uncertainty. I don't
18 understand how you can say that we calculated a
19 highest dose that will not involve uncertainty,
20 and then, by another procedure under the same
21 program, come up with another number that's
22 bigger.

23 **DR. NETON:** Okay.

24 **DR. MAKHIJANI:** That's -- that's the problem
25 I'm having.

1 **DR. ZIEMER:** Okay, I underst--

2 **DR. NETON:** I understand. You're actually
3 arguing the reverse, which is if we've denied
4 cases based on maximum plausible, then we
5 should not have a higher maximum plausible for
6 SEC, and I agree with that. I'm sorry for --
7 if I was the only dense one in the audience,
8 but I'm glad (unintelligible) --

9 **DR. ZIEMER:** It's kind of a terminology issue,
10 really.

11 **DR. NETON:** Right.

12 **DR. WADE:** Arjun's point, while it stands on
13 its own strength intellectually, is also of
14 great value for us to hear what he's saying as
15 it relates to our ability to communicate
16 consistently with people.

17 **DR. NETON:** I apologi--

18 **MR. GRIFFON:** Well said.

19 **DR. ZIEMER:** Thank you. Okay, we'll proceed
20 with the subtask two --

21 **DR. MELIUS:** I -- I have a --

22 **DR. ZIEMER:** Oh, I'm sorry. Jim, please.

23 **DR. MELIUS:** -- and doing that, and -- first of
24 all, I thought your review of these procedures
25 was -- was helpful and I do sort of want to go

1 through a couple of the concerns and so forth
2 because I think we're -- I'm not sure we need
3 more (unintelligible) and I think we all are in
4 the process of addressing some of them, and I
5 think we need to acknowledge that. And one is
6 the issue of the 250 days, and I think -- as we
7 discussed, and I think coming out of what we're
8 doing with Pacific Proving Grounds I think
9 we'll have more clarification on how to do deal
10 with that in both -- there's some regula--
11 legal, regulatory -- you know, regulation-
12 related issues as well as sort of how we --
13 sort of practical way of addressing certain
14 situations where -- where that comes -- may
15 come up and -- and so -- but I do think it --
16 it was helpful.

17 The one comment I'd like to hear back from
18 either Larry or Jim is this -- it's other --
19 under the other major concerns slide was the
20 last point, which was no procedures on
21 determining the breadth of the class when NIOSH
22 finds that it cannot reconstruct a claimant's
23 dose. It -- and I've just been trying to
24 understand how you -- I mean I -- I think --
25 comments that there were no written procedures.

1 There's nothing in place yet. I think you're
2 doing it, just -- you know, evaluating these
3 petitions and so forth and just sort of your
4 response is well, should we try to formalize
5 that in some ways that -- as a guideline or --
6 I -- you --

7 **DR. NETON:** Yeah.

8 **DR. MELIUS:** -- you know, and to me, the other
9 (unintelligible) corollary to that is this
10 whole issue of how do we divide up a proposed
11 SEC into groups that can be constructed --
12 reconstructed and those that can't, and there's
13 sort of this class definition thing, which I --
14 I also think that you're wrestling with, but --
15 and you've never -- you've sort of accepted --
16 you sort of present this and we -- we never
17 really talk much about the rest of the universe
18 there, the years you're not presenting to us or
19 -- or groups and so forth and -- and --

20 **DR. NETON:** I agree. For the record, I -- I do
21 agree, there's no procedure for determining the
22 breadth of the class. But I think,
23 operationally, this is -- this is very much
24 driven by the availability of the data. The
25 data speak for themselves, and how one would

1 proceduralize that is -- would be difficult for
2 me to envision. I mean we could say exactly
3 that sort of thing. But you know, if you -- if
4 you have a class of workers who worked the
5 third shift and they walked around the plant
6 and had no monitoring data and had similar
7 exposures to the people on the second shift,
8 then that sort of just funnels itself right
9 into that definition. The fact of the matter
10 is, we rarely have that type of a situation,
11 and you start looking at classes of workers who
12 may have been all over the plant and you can't
13 necessarily put them in time and space
14 anywhere. I'm not sure how one would -- would
15 narrow it any better, other than a detailed
16 analysis of what we have in our hands at the
17 time.

18 **DR. MELIUS:** (Off microphone) (Unintelligible)
19 I thought, but now I'm really in trouble 'cause
20 I've invoked legal counsel.

21 **MS. HOMOKI-TITUS:** No, I -- I just wanted to
22 remind you --

23 **DR. MELIUS:** Or provoked, I guess is...

24 **MS. HOMOKI-TITUS:** -- NIOSH has also limited
25 what they present to you by what the petition

1 is, so years you're not seeing are because
2 they're years that were not petitioned upon.

3 **DR. MELIUS:** (Off microphone) Yeah,
4 (unintelligible) --

5 **MS. HOMOKI-TITUS:** So if you get a Y-12
6 petition for ten years, eventually the Board
7 will get an SEC response from NIOSH on those
8 ten years, but not the 20 that followed it.

9 **DR. ZIEMER:** But we also have cases where NIOSH
10 initiates the class based on their own findings
11 --

12 **MS. HOMOKI-TITUS:** Right.

13 **DR. ZIEMER:** -- and I think this may be --

14 **MS. HOMOKI-TITUS:** (Off microphone) Jim's
15 response (unintelligible) --

16 **DR. ZIEMER:** -- if you find a group, I think
17 the issue is how do you know that you've
18 encompassed the right subset or subsets to --
19 to define the class. And sort of intuitively
20 you are doing something, and I guess Jim may be
21 asking does that need to be codified in some
22 way, or do you just describe what it is you do
23 to find -- I guess that's (off microphone)
24 (unintelligible) --

25 **DR. NETON:** We could certainly attempt to do

1 that. I mean --

2 **DR. MELIUS:** What I would suggest would -- you
3 know, think of it as a suggestion and -- is
4 that you include a step in this process that,
5 after you've done or -- you know, done a lot of
6 the evaluation, you understand what the
7 critical datasets and so forth, you sort of
8 examine that and say what -- what does this say
9 about who should be included, not included, and
10 are there other groups that the same facts
11 apply to (unintelligible) the same
12 circumstances apply to 'cause why -- 'cause
13 they're going to get -- end up in the SEC class
14 one way or the other. They're -- they're going
15 to end up -- we shouldn't make them have to
16 petition 'cause you're going to identify them
17 when you go to reconstruct their doses,
18 presumably, and we'd have to go through the
19 whole process again. It seems to me it would
20 be -- could be -- it could be more efficient to
21 sort of do it in one step and...

22 **DR. NETON:** I think, though, that to a large
23 extent the draft guidelines put together by the
24 working group are going to help with that
25 because we're now -- we're now focused on

1 looking at not only what was monitored and who
2 was monitored, but what was not monitored. I
3 mean we're required now to go back and look at
4 all these, as John called, exotic -- I'll call
5 ancillary nuclides of exposure and say well,
6 you know, there was also plutonium, americium,
7 curium, and were -- were there monitoring
8 programs in those areas. And then we would
9 define -- it -- it's almost -- ends up being
10 defined then by nuclide type, which is not
11 really helpful, but then you have to figure out
12 what work classes would fall into exposures for
13 those things.

14 The good thing is right now we're investigating
15 Calutron/Cyclotron operators at Y-12. You
16 know, they were exposed to isotopes other than
17 uranium, and so we're -- the procedures that
18 the workgroup put together are funneling us
19 towards that. I think that'll be helpful.

20 **DR. MELIUS:** Yeah, and again, not trying to --
21 think we should try to make unnecessary work,
22 but the data's all in front of us. We're
23 evaluating it. Let's take advantage of that
24 time when we're discussing it to decide what
25 more needs to be done so that way we don't have

1 to come back to it two years later or whatever.
2 I think that would worth thinking about.

3 **DR. NETON:** I totally agree. I think, you
4 know, having done this a few times now, we have
5 a lot more knowledge as to -- as to what we're
6 doing and what's available, and --

7 **DR. WADE:** And just a comment for the record,
8 this issue of who's to be included and who's
9 not to be included, I think we have to consider
10 inviting into the discussion our colleagues
11 from DOL who often are left with making these
12 decisions once the Board has made a
13 recommendation and the Secretary a
14 recommendation. So I think there is -- there
15 are many voices to be heard for us to do this
16 right. I don't think we started out doing it
17 perfectly right, but that doesn't make us bad
18 people. But I think we can evolve the process
19 as we go.

20 **DR. ZIEMER:** Okay. Okay, thank you. Arjun, if
21 you'll continue, please.

22 (Pause)

23 **DR. MAKHIJANI:** So this was the second report.
24 This -- this really has two parts. One -- one
25 was based on what had happened with the review

1 SEC petitions, what we might suggest as Board
2 procedures, and the second was what we might
3 suggest for our own procedures. This was
4 subtask two, which you also commissioned.
5 For the Board procedures, we suggested that we
6 think about it in three phases, and this is I
7 think fairly -- has a fair degree of overlap
8 with what the Board working group did, but it
9 sets it forth in kind of a time frame that may
10 be a little bit different. The phase one would
11 be preliminary steps taken immediately after
12 NIOSH qualifies a petition for evaluation. And
13 phase two would be during the time that NIOSH
14 is actually evaluating the petition. And phase
15 three would be after NIOSH has submitted an
16 evaluation to the Board for consideration.
17 Okay. So the most important part of phase one
18 was that we thought that it might be helpful if
19 NIOSH would start with some implicit evaluation
20 plan when it begins evaluating the petition. I
21 mean it's got a certain amount of data there in
22 front of it, documents, perhaps dose
23 reconstructions that are relevant. And if
24 NIOSH could submit a plan, you know, to present
25 the documents and how it is proceeding to

1 evaluate the petition at about the time it
2 begins to evaluate itself the petition, the
3 Board, through a working group, could begin
4 that process to identify the issues. And that
5 would make the process of evaluation of the
6 petition involve the Board more closely, rather
7 than having a completed product presented to
8 the Board after the evaluation is complete.
9 And doing that review by the Board serially and
10 -- that would cut down the time and also
11 there'd be a greater likelihood that all of the
12 relevant issues would be put on the table
13 during the process of NIOSH evaluation of its
14 petition. But that of course depends -- the
15 key step is that when NIOSH begins its own
16 evaluation that a relatively rich plan that it
17 itself is following, together with the
18 documentation, is -- is supplied to the Board.
19 So phase two -- this derives a lot from -- from
20 the experience that we had with Mallinckrodt
21 which went on for quite a long time, and -- and
22 partly is suggested to compress that procedure.
23 The dose -- example dose reconstructions that
24 would illustrate the issues would be defined
25 and provided. NIOSH would do them itself. The

1 Board would review the material. And the
2 overall goal of this step would be to ensure --
3 would be focused on these example dose
4 reconstructions to ensure that the issues that
5 are relevant to the feasibility of dose
6 reconstruction would -- with sufficient
7 accuracy would be examined in depth so that
8 NIOSH, as well as the Board, could -- could
9 arrive at a conclusion whether -- as to -- as
10 to the feasibility.

11 Then in phase three, the phase three is
12 relatively straightforward. It's spelled out
13 in 42 CFR 83 quite well, and -- and the Board
14 has already been following this: to hear from
15 NIOSH, to hear from the petitioners, to hear
16 from others and consider all the different
17 points of view and decide whether a further
18 review is needed or whether you can take
19 action. So the phase three part of it is -- is
20 not at all new, whereas the other two phases
21 would be basically drawn on the experience of
22 what the Board has done in the past year to
23 review SEC petitions.

24 So that -- I don't know if you want me to pause
25 here or just go on through to the end. We also

1 suggested draft procedures for the Board
2 contractor, and they're spelled out in quite a
3 bit of detail, but basically it would be to
4 review the petition and associated documents
5 and to determine what kinds of partial dose
6 reconstructions would be needed in order to
7 clarify the issues regarding feasibility of
8 dose reconstruction. We propose to interview
9 site experts and at least one of the
10 petitioners as a required part of the
11 evaluation process. If there is a full --
12 these steps involve the evaluation after NIOSH
13 has submitted an -- its own SEC petition
14 evaluation, if SC&A or the contractor is asked
15 to review the whole evaluation that NIOSH has
16 done, this would be -- it would be a rather
17 lengthy and detailed process that would involve
18 these interviews that would involve looking at
19 dose reconstructions and of course working
20 under the direction of the Board and the
21 working group to assess the representativeness
22 of the data, the adequacy, validity and to see
23 whether the technical issues that had been
24 raised in regard to feasibility have been
25 satisfactorily assessed.

1 Now the Board did ask us to examine what we
2 might do when there is a site profile and a
3 site profile review and those minimum things
4 are -- are mentioned here. When there's --
5 when there's no site profile review, we would
6 not propose to undertake a site profile review
7 as part of an SEC petition process. It would
8 be more targeted review of the site profile
9 that was relevant only for those issues in
10 regard to maximum dose reconstruction. I think
11 this has been exemplified by some of our
12 presentations yesterday and today where we did
13 make an effort to sort out those issues --
14 while they may be significant for dose
15 reconstruction -- but we thought can be
16 resolved. Like, for instance, the geometry --
17 the geometry of the workplace in relation to
18 the badge when it is known. This is -- this is
19 something that can be done and doesn't rise to
20 the level of whether dose reconstruction is
21 feasible, but merely how it should be done.
22 Whereas there were other issues that have been
23 raised in regard to Rocky Flats and Y-12 that
24 would need to be resolved to determine the
25 feasibility. So we would sort those out and

1 focus only on those issues where feasibility
2 was involved and nothing else. Of course we
3 would not be dealing with minimum or -- or best
4 case doses at that stage, but just the
5 feasibility.

6 And similarly when there's no site profile,
7 then we would perform a focused review of the
8 conditions at the site -- radionuclides, job
9 types and so on -- with the same targeted idea,
10 that what is relevant for maximum dose
11 reconstruction under plausible assumptions for
12 that site.

13 There's a little bit of a complication that --
14 it's not really discussed at length, in the
15 sense that these procedures don't cover what
16 might happen in regard to drawing data from
17 other sites. We've been silent on that. NIOSH
18 does use that, and we would just follow in our
19 evaluations what NIOSH had done, not --
20 presumably not be initiating our own
21 investigations on other sites.

22 In regard to partial reviews, there is
23 provision in the task order for partial
24 reviews. I imagine that that would happen in
25 what I described as phase two of the Board

1 procedure. Should the Board choose to ask for
2 some support from your contractor, then you
3 would define the issues during the process of
4 NIOSH evaluation of the petition and we would
5 work along with you on those issues, as we did
6 at Mallinckrodt and Iowa, and as we are doing
7 in -- so far in the case of Y-12 and Rocky
8 Flats.

9 That simply gives you the review preparation
10 team.

11 **DR. WADE:** Just to expand on what Arjun said,
12 part of the task we put in place with SC&A
13 allows for the Board to task SC&A with
14 assisting it in a petition evaluation review.
15 And Arjun talked about the two types, sort of a
16 full review and then this -- this task-
17 specific. So -- I mean all of the mechanisms
18 are available to you now to use as you might
19 like, and I think Arjun made that fairly clear
20 in his comments.

21 **DR. ZIEMER:** Okay, questions or comments, Board
22 members, on this -- okay, Dr. Melius.

23 **DR. MELIUS:** Yes, I would just offer up that I
24 think that, given the time frame for trying to
25 address these, that -- that I think we possibly

1 want to avoid the complete reviews, that --
2 that -- you know, the partial review -- and I -
3 - I hate to call it partial, I'd rather call it
4 targeted or something that doesn't
5 (unintelligible) --

6 **UNIDENTIFIED:** (Off microphone)
7 (Unintelligible) focus (unintelligible).

8 **DR. MELIUS:** -- for the focused review that we
9 -- would be more appropriate because --
10 particularly where there's been a site profile
11 review. I think when there's no site profile
12 review, then I think this becomes lengthier
13 just -- you know, particularly for a large
14 site. Now for a small site or something, or --
15 not a -- a less complicated site, that may be
16 different. But for a large site, then without
17 a site review it -- it's going to take some
18 time to -- to make it -- make it through the
19 process.

20 And this is a question both for -- I guess for
21 -- sort of the suggestion for the Board, but
22 also for -- for NIOSH that when we talked
23 yesterday about the -- a workgroup report, we
24 made the suggestion that there be -- that
25 currently NIOSH develops its evaluation plan

1 very early and it's a very general plan, so
2 this leads to the general steps that we're
3 going to take. Seems to me that there's some
4 point, after NIOSH has had a -- maybe a little
5 bit more of a chance to review the materials,
6 think -- think about the petition, so forth,
7 that there -- there would be a time when we
8 could pull together -- you know, that NIOSH
9 would have more specific plan, what were going
10 to be the crit-- what they saw to be the
11 critical datasets and -- and so forth, that
12 that would be the time to put together -- pull
13 together NIOSH, a workgroup and the contractor,
14 sort of sit down -- particularly the contractor
15 staff would have been involved in the site --
16 site profile review, to sit down and -- and
17 sort of look at how do we -- you know, where do
18 we go from here, how do we go through and
19 review the -- the portions of that site
20 profile, the portions of the data that are
21 going to be important for the SEC evaluation.
22 And I -- if I understand the task order so
23 forth -- process right, I think that would be
24 an appropriate way of -- of proceeding. The --
25 the issue would be scheduling that first

1 meeting, but from there there should be -- then
2 be sort of a work plan and everyone be able to
3 sort of schedule out what would be involved.
4 I think when I was listening this -- when we
5 were discussing the Y-12 site profile review,
6 in some sense that's already being done there.
7 I mean I think -- gives a pretty good idea what
8 the critical parts are, you know, that need --
9 and I think even for Rocky Flats, I thought I
10 heard -- heard the same and so forth. But --
11 but to me, that would be a way of having a
12 procedure in place, avoiding a very lengthy
13 step-wise -- you know, serial process, but
14 let's try to do some of this in parallel. Keep
15 the -- our contractor's task sort of focused in
16 relationship to the -- to the SEC review.
17 Is -- is that making sense, I guess is my
18 question to my fellow Board members and NIOSH?
19 **DR. ZIEMER:** Well, in a sense what we're doing
20 now is -- is targeted reviews of the site
21 profile to assist us in -- in the SEC
22 evaluation, so that's -- in practice is what's
23 happening.
24 **MR. GRIFFON:** I -- I was going to -- I mean as
25 I read this section, I was thinking the full

1 review is actually what we're now calling the
2 targeted site profile review 'cause there --
3 it's a full review of the -- of the issues that
4 may affect the SEC, you know. That's -- that's
5 sort of how I was interpreting it. But -- I
6 mean I -- if you want to modify the language, I
7 think that was the intent.

8 **DR. MELIUS:** Yeah, it's a little bit mixed in
9 how it's presented, 'cause I think we're also
10 going back to sort of Mallinckrodt examples and
11 so forth where we got -- we were really using
12 the site profile review --

13 **MR. GRIFFON:** Right.

14 **DR. MELIUS:** -- in lieu of a -- a SEC review,
15 and I think that has some disadvantages in
16 terms of -- of some of the questions it can
17 focus on, and that was some of our -- our
18 problem. We weren't necessarily getting --
19 weren't having our contractor, you know, answer
20 some of the key questions or give us advice on
21 some of the key questions.

22 **DR. ZIEMER:** All right. We'll hear from Larry
23 and then from John.

24 **MR. ELLIOTT:** You know -- yes, we have been
25 dwelling on the early history of our

1 development of the evaluation reports on
2 petitions, and I would say that our
3 Mallinckrodt experience and our Iowa experience
4 are -- are learning experiences, one we're
5 building from.

6 The plan that we gave you -- that we give you
7 on every evaluation of a petition is a generic
8 plan. It is not specific in detail. It is, we
9 hope, comprehensive in its general--
10 generality. What's lost -- in my understanding
11 of the proposal that has been made by the
12 working group and what I see in SC&A's comments
13 in their review about another plan, a more
14 detailed plan -- is that we're struggling with
15 our -- we're struggling really hard trying to
16 come forward in 180 days with a scientific
17 basis to make a recommendation to add or deny a
18 class. And I'm not sure -- I can't -- I can't
19 seem to grasp how we would do that in
20 conjunction of providing a detailed plan along
21 that trail.

22 I see it more as what I can -- what I can
23 understand in my mind is a more concerted
24 coordination effort where we sit with the
25 working group and SC&A and say here's where

1 we're at, here's the -- here's the -- the
2 salient issues that we're wrestling with on how
3 to evaluate this petition. And you know, I
4 think if we can -- if we can approach it as a
5 more -- a better coordination effort, we're
6 better off. I hate to see -- to me, a plan, an
7 additional detailed plan within the context of
8 a 180-day time requirement, is make-work for
9 us. And I'm not sure that's going to get us a
10 lot farther down the road or a lot quicker down
11 the road. But I do believe that a better, more
12 concerted coordination effort can get us to
13 where we want to be.

14 **DR. ZIEMER:** Your concern then is that you may
15 spend an excessive amount of time on the plan
16 versus actually doing the job that needs to be
17 done.

18 **MR. ELLIOTT:** Yeah, we don't have a lot of time
19 --

20 **DR. ZIEMER:** Yeah, right.

21 **MR. ELLIOTT:** -- in 180 days to create another
22 plan.

23 **DR. ZIEMER:** No.

24 **MR. ELLIOTT:** And that's why you haven't seen
25 us come forward with a different version of a

1 plan for each SEC petition.

2 **DR. ZIEMER:** Yeah.

3 **MR. ELLIOTT:** We gave you a general -- what we
4 consider --

5 **DR. ZIEMER:** A generic approach, yeah.

6 **MR. ELLIOTT:** -- a generic, comprehensive plan
7 that spoke to these are the types of things
8 that we would have to consider in evaluating a
9 petition. And we've stopped short of providing
10 any further detail on that. I certainly want
11 to work, you know, in a more coordinated
12 fashion with the working group and the Board
13 and SC&A on getting to the end product here.
14 But I'm not sure that -- in my opinion, I don't
15 think we can just generate another plan and
16 it's going to help us get there.

17 **DR. ZIEMER:** Thank you. John.

18 **DR. MAURO:** I'd like to bring up a practical
19 issue related to managing budgets and how we're
20 proceeding with our work. When we have a site
21 profile such as Y-12 where we perform our
22 review, deliver our product, the bottom line is
23 that -- the way we try to manage it is we try
24 to deliver that product to you -- thick book --
25 within 1,000 work hours. That's how we manage

1 ourselves. We set aside 150 work hours for the
2 closeout process. Okay? So let's say we're
3 dealing with a site profile that is -- does not
4 have SEC implications. That plan works. I
5 think it's very doable to, within 150
6 additional work hours, to engage in the
7 dialogue, hold our meetings with the working
8 groups, close out issues, put it to bed -- if
9 we can.

10 However, what I am concerned about is -- let's
11 use now Y-12 as an example. Okay? We've
12 delivered our Y-12 work product. We did --
13 delivered it within budget. But right now I
14 have in the bank 150 work hours to support the
15 closeout process. Well, the closeout process,
16 as we all know, is now really part of the SEC
17 process. I don't know what we will be called
18 upon to do. Previously Mark had mentioned that
19 we had these 6,000 records. Probab-- there
20 might be some things that you may call upon us
21 to do. It may simply be on the back end to
22 take a look at whatever the results are. You
23 may call upon us earlier to be more involved.
24 What I -- I guess where I'm going with this is
25 that keep in mind that when we're in an SEC

1 mode, we are going to run into back-end work
2 hour problems; 150 work hours will blink out of
3 existence like that (indicating) when we get
4 involved aggressively in the SEC closeout
5 process.

6 **DR. ZIEMER:** Thank you. Okay. Arjun?

7 **DR. MAKHIJANI:** Yeah, when we were drafting the
8 -- the report, both for Board procedures and
9 SC&A procedures, we did think it useful to kind
10 of focus -- and maybe it's my lack of
11 understanding of, you know, institutionally
12 what's involved in developing a site-specific
13 plan. And perhaps the words that Larry used
14 would be -- would be more appropriate. And I
15 think if that's what we've been doing now in
16 regard to SEC and focusing those issues, that -
17 - that would be appropriate. I -- I don't
18 know, but we -- certainly some site-specific
19 information from NIOSH is necessary as to how -
20 - where NIOSH is and how they're evaluating in
21 the process.

22 And -- and the one point I think where a lot of
23 effort is needed on SECs where no effort, or
24 very -- well, I wouldn't -- I shouldn't say no
25 effort, but some internal effort is put in when

1 we prepare site profile reviews and in
2 coordinating with the folks that are doing dose
3 reconstruction audits to figure out what's
4 going on in individual dose reconstructions and
5 so on, but while we inform ourselves during the
6 review, there isn't a huge effort around dose
7 reconstructions when we do site profile
8 reviews. There's some, but there's not a lot.
9 And it seems to me, the way it has worked out
10 and what seems to best exemplify feasibility
11 under SEC, that a lot of effort has to be
12 devoted in developing, defining and then having
13 some rubber meets the road test around are
14 these methods actually applicable in real dose
15 reconstructions. And I think that is -- that's
16 the big point of departure between just doing a
17 site profile review, other than documentation
18 and verification and so on with various
19 other...

20 The other -- the other big difference is -- in
21 site profile reviews, just to remind you of
22 what our own procedure has been and what we've
23 been delivering to you, is we don't cover all
24 issues. We highlight issues -- we call them
25 vertical issues. We don't promise you that

1 we've chased every last thing down. Whereas
2 when you're doing an SEC petition review,
3 within the framework of a more limited dose
4 reconstruction idea, you do have to chase down
5 the last thing on feasibility for the last
6 answer for all cancers and for all members of
7 the class. And so the goal is very different.
8 And while we've been kind of muddling along in
9 terms of -- if I might use that phrase, you
10 might excuse me -- that to -- to move ahead
11 with site profile reviews, I do think, having -
12 - having spent quite a lot of time drafting
13 these reports, that there is a great deal of
14 merit in having something that is focused on
15 SEC reviews.

16 **DR. MELIUS:** Can I respond to a couple of those
17 points?

18 **DR. ZIEMER:** Yeah, let me have Mark -- Mark was
19 up (unintelligible)...

20 **MR. GRIFFON:** (Off microphone) (Unintelligible)
21 I mean I was just going to say that I think
22 what -- Larry's comment I think speaks to the
23 spirit or the goal of our intent, which was
24 earlier involvement with the Board and the
25 contractor -- and our contractor and, you know,

1 I don't know that -- I -- I tend to think --
2 you know, we don't need a -- my fear here, I
3 think, is that if -- if we put a step in to
4 develop a plan -- as long as we have a
5 commitment for earlier involvement, I'm not
6 sure we needed a commitment for a plan because
7 I think that plan may be out the window by the
8 end of the 180 days, anyway. So you know, I
9 think that the -- the real thing we need is
10 that -- that -- that commitment for the earlier
11 involvement and -- and get together, focus,
12 find out what -- you know, put the issues on
13 the table, the likely issues that are going to
14 come up in this SEC review, and then go forward
15 from there, you know, so --

16 **DR. MAKHIJANI:** Yeah, Dr. (unintelligible) you
17 know, I haven't consulted with my colleagues,
18 obviously, but I -- I do take -- I do take the
19 spirit of Larry's comments, and I entir--
20 entirely agree with you. There's -- there's
21 not a bureaucratic intent in -- in what we
22 propose, but --

23 **DR. ZIEMER:** Right, understood. Jim.

24 **DR. MELIUS:** Yeah, first of all, to answer
25 John's question, yes, you will get -- you will

1 get paid, that's why we (unintelligible) the
2 task for the SEC reviews --

3 **DR. ZIEMER:** Notice who's guaranteeing it,
4 though.

5 **DR. MELIUS:** -- we just want to make sure you
6 don't get paid too much, so we want to focus it
7 a little bit, so -- that. (Unintelligible) I
8 thought about this a little bit and yeah, we
9 don't want to (unintelligible) but there are
10 some things that I think you -- from the time
11 you produce your generic plan to the time that
12 you really get going on the (unintelligible)
13 plan, you do, and I think one of the steps that
14 you do -- that you have access to that we don't
15 are the completed site -- the dose
16 reconstructions or those underway for that
17 particular site. And I think you can -- you
18 pull those out, you understand what -- what ex-
19 - what datasets you've used to do those, what
20 have been the problems and so forth. And I
21 think bringing that experience -- and I think
22 that takes you some time to do, I -- I think
23 bringing that experience forward
24 (unintelligible) not preparing a report but
25 being ready to talk about that with a workgroup

1 from the Board, with the Board's -- our
2 contractor there, along with whatever has been
3 done to review the site profile and so forth is
4 going to -- you know, that's the plan. That's
5 where you're going to -- we'll develop a plan.
6 Is that plan going to be perfect? No. Does it
7 have to be a written thing that gets reviewed?
8 No. But -- but I think -- you bring that. Our
9 contractor would bring, you know, the site
10 profile review that's been done, or at least --
11 and maybe -- wherever that is. It may be
12 underway, it may not be completed yet. They
13 would bring that, and from that, hopefully we
14 would develop, you know, a way forward that
15 would be sort of more focused.

16 What our guidelines -- our workgroup guidelines
17 and so -- and the criteria and so forth that we
18 talked about yesterday and talk about more
19 today, I -- I think, again, provide sort of a
20 framework for providing that focus, but I don't
21 think anyone's expecting that, yeah, it's these
22 three datasets that we're going to spend -- you
23 know, and, you know, do this, that and that.
24 It's not that kind of a plan, but -- but at
25 least there'd be a way forward and yeah --

1 yeah, we need to do this and meet again in, you
2 know, a month and we'll provide this to you,
3 something like that. And I think the --
4 estimating that it's going to be -- claiming
5 it's going to be done in 180 days or 120 days
6 or whatever, you're not going to know at that
7 point in time. You're not going to know until
8 you figure out, but at least you'd have some
9 sense of what the -- the overall scope and
10 resources necessary and what you'd have to do.
11 But -- but you already have some inform-- you
12 don't -- you'll have information that nobody
13 else has access to at that point in time.

14 **MR. ELLIOTT:** It's better to bring you all
15 along as we go through it, I agree. I see the
16 merit and the benefit to that. And as Dr.
17 Neton answered your question earlier about our
18 -- our attitude and our feelings toward the --
19 the sufficient accuracy paper that you talked
20 about earlier, we are behaving that way. We're
21 taking that seriously and we're -- we're
22 modifying how we go about doing our evaluation
23 of a petition, recognizing that the Board wants
24 to see example dose reconstructions if we're
25 saying to deny the class. How can we go about

1 doing a dose reconstruction in order to support
2 that recommendation. I think that we would all
3 be better served if we could map out, in a
4 time-line fashion, you know, what has to happen
5 over the course of this 180-day mark and -- and
6 know that there's certain suspense dates in
7 that time line that certain things have to
8 happen. We have to have a meeting with the
9 working group, we have to share with the
10 working group where we're at currently, what --
11 what we're wrestling with. We should vet draft
12 examples and make sure that they're going to be
13 compelling enough, or are we going to have to
14 go back to the drawing board and find some
15 more, give you a better sense of all of the
16 dose reconstructions that have been completed
17 to date and how they were completed and why we
18 think they were done with sufficient accuracy.
19 All of that I think could be mapped out in a
20 time line which may serve us well -- you know,
21 better than a -- creating a plan and then
22 coming back and saying well, that plan didn't
23 work. We've got to create another plan.

24 **DR. ZIEMER:** Yeah. Good. Other comments or
25 questions?

1 **DR. WADE:** I have a comment.

2 **DR. ZIEMER:** Yes, Lew.

3 **DR. WADE:** I mean I think this has been a very
4 useful discussion and -- and I think the spirit
5 of what Larry put on the table I think is
6 exactly what Arjun came suggesting. So I think
7 while it might have been different terminology,
8 I think there's a great deal of coincidence
9 there.

10 What I would point out to the Board, though, is
11 that -- and I've given you this piece of paper
12 which speaks to sort of the status of -- of SEC
13 petitions. And I'm not saying you need to do
14 it now, but if you want to think about having
15 that meeting that Larry sort of offered that
16 Arjun is asking for early in the process to
17 sort of sort out these issues, your -- your
18 target of opportunity is limited in that -- I
19 mean if you'll look at this page, you have --
20 now we -- we've -- we're working on Pacific
21 Proving Grounds, Y-12 and Rocky Flats. You can
22 do more on those if you wish. But the only
23 three other qualified petitions are listed
24 there. You might want to choose one of those
25 to use as the first example of trying to put

1 this process into place, and that is have this
2 early interaction between SC&A, NIOSH and the
3 Board to try and work these issues, whatever
4 you call it. I'm not suggesting you do that,
5 but there's an opportunity to do that. The
6 targets of opportunity are somewhat limited.
7 In NIOSH-speak, it's not a petition until it's
8 qualified.

9 **DR. ZIEMER:** Thank you. Other comments now?
10 Larry, uh-huh.

11 **MR. ELLIOTT:** The public -- I don't know if the
12 public realizes this, but the document you're
13 talking about is on the table.

14 **DR. WADE:** Okay.

15 **MR. ELLIOTT:** And I just think that it would be
16 of -- in good order to read, for the record,
17 what site petitions we are currently evaluating
18 so that --

19 **DR. ZIEMER:** Go ahead, Larry.

20 **MR. ELLIOTT:** -- you know, it can be codified
21 there. We have the -- the Pacific Proving
22 Ground, which you have attended to today. We
23 have Y-12, that's petition 28 and that covers
24 the plumbers, pipe-fitters and steamfitters
25 from '44 to '57 and we talked about that also

1 at this meeting. We also have the Rocky Flats
2 petition, and of course we're way behind on it
3 and we want to get the site profile resolved in
4 order to make the evaluation report stand on
5 its own merit.

6 We also have the Oak Ridge Institute for
7 Nuclear Studies, and here's an interesting one
8 because almost all of the ORAU folks are
9 conflicted on that and so my folks are doing
10 that, and that presents us another resource-
11 limiting problem.

12 We also have Ames, Iowa, which is a very
13 interesting site and my folks are telling me
14 that they're coming along fine with working on
15 that. There's a lot of good documentation that
16 the petitioners have provided us and, you know,
17 maybe that's one you might want to pick up and
18 we -- we start working a time line against.

19 We also have Chapman Valve that's been
20 qualified, and so we are preparing to -- you
21 know, initiate our evaluation report on that.

22 **DR. MELIUS:** On which of -- of those latter
23 three, which ones have site profiles? Or are
24 included in site profiles, that may be...

25 **MR. ELLIOTT:** Jim, I would ask you to correct

1 me if I'm wrong, but I don't believe Ames
2 Laboratory has a site profile. Chapman Valve
3 does.

4 **DR. MELIUS:** That's what I thought.

5 **MR. ELLIOTT:** Oak Ridge Institute for Nuclear
6 Studies does not. So there's different --
7 that's good to know the flavors that we have to
8 deal with here.

9 **DR. MELIUS:** And on Chapman Valve, is the --
10 are you reviewing that, John?

11 **DR. MAURO:** No, we -- we have cases -- we have
12 cases that involve that, and as a result of
13 that we read and review the site profile that's
14 -- that's relevant, but we do not have -- we
15 have not been authorized to review Chapman
16 Valve as a site profile.

17 **DR. ZIEMER:** Okay.

18 **MR. ELLIOTT:** Also on this --

19 **DR. ZIEMER:** Larry.

20 **MR. ELLIOTT:** -- second page -- I apologize,
21 this was a FAX that we had sent in to us today,
22 and the second page lists a summary of active
23 SEC submissions and petitions, some of which
24 are duplicated from the first page, but some of
25 which here on the second page have not yet

1 qualified. And I apologize for the two black
2 lines here. I'm sorry, I can't -- I can read
3 the bottom line, that's Linde Ceramics, and the
4 class has been added and that's been treated.
5 I don't know what -- I think the other top line
6 that's black --

7 **UNIDENTIFIED:** (Off microphone)
8 (Unintelligible)

9 **MR. ELLIOTT:** Yeah, that's NBS -- that's NBS,
10 and so that's been dealt with, as well.

11 **DR. WADE:** So just to give the Board some --

12 **DR. MELIUS:** I thought they were redacted. I
13 wasn't even going to try, that's the reason
14 I...

15 **DR. ZIEMER:** Lew.

16 **DR. WADE:** Well, but just again now, if the
17 Board is -- it wants to in earnest move forward
18 with trying to utilize its contractor, this is
19 the universe. Maybe it'd be worth choosing one
20 and having an early meeting.

21 **DR. MELIUS:** Can I work -- as a question, going
22 backwards. What about Y-12 and Rocky Flats,
23 where are we in terms of -- obviously we -- I
24 don't think we can necessarily go through the
25 whole plan as we've talked about, or the

1 process, but we do have those that are going to
2 come up shortly -- shortly for consideration.
3 They are, you know, fairly technically
4 complicated. We have site profile reviews
5 underway, but I thought I heard -- what John
6 was saying is that he's sort of running out of
7 room to do -- do much, I mean -- which I think
8 is a legitimate concern on those, and I would
9 think that we'd want to consider invoking our
10 contractor's assistance on both of those, also,
11 in terms of the SEC evaluation portion of it.

12 **DR. ZIEMER:** I'm going to suggest that you keep
13 that thought in mind, and we'll return to it.
14 Now what I'd like to do is get our document on
15 the board, and then having the input from the
16 two presentations by SC&A and the discussion
17 that we heard and our own document, you'll have
18 a chance to mull this over tonight --

19 **DR. WADE:** We have time on the agenda tomorrow.

20 **DR. ZIEMER:** -- and tomorrow we have time on
21 the agenda to move forward with a specific plan
22 and, if so desired, to identify some -- one or
23 more sites. I would prefer that we not try to
24 identify sites until we get through the
25 framework on which we will proceed.

PROCEDURES FOR BOARD EVALUATION OF SEC PETITIONS -
DISCUSSION PART II (INCLUDING DISCUSSION OF THE PENDING
Y-12 PETITION AND A DISCUSSION OF THE SC&A SEC TASK)
DR. JAMES MELIUS, ABRWH

1 So with that in mind, we come to the item
2 called procedures for Board evaluation of SEC
3 petitions. Yesterday Dr. Melius gave us an
4 overview of the document. We had -- and the
5 Board has had the document in advance to look
6 at. I think now is the opportunity to have
7 further discussion on that document, input.
8 And we do not have to necessarily approve the
9 document today, but we might -- we might
10 identify -- if there are any substantive
11 changes to make, identify what those are.
12 Lew, I think you expressed to us the interest
13 of the Secretary's office in the document as
14 it's developed. Is -- is there an interest in
15 having input from them --

16 **DR. WADE:** Yes.

17 **DR. ZIEMER:** -- as well, let me ask you --

18 **DR. WADE:** Yeah, let me -- let me speak to this
19 just briefly. As I mentioned yesterday, the --
20 I briefed the Secretary's staff on the agenda,
21 and there was particular interest in this item,
22 as you can imagine, because the Secretary is --
23 is the recipient of your recommendations. So

1 as I mentioned yesterday, the Secretary is very
2 interested in your giving a full vetting of the
3 document, as you -- as you go through. The
4 Secretary would also like the opportunity to
5 comment on your procedures before you finalize
6 them, and I think we should afford the
7 Secretary that opportunity.

8 It doesn't mean you can't be guided by what you
9 do and we can't make decisions, and we need to
10 make decisions as we move forward. But I think
11 there is an interest on the Secretary's part to
12 -- to provide you with comment as you move to
13 finalize.

14 The other thing that I would propose that we do
15 is we need to hear from counsel as to what
16 timeliness means in the context of the law and
17 the rule. And whether we do that tomorrow
18 morning or whether we do that now, I think it
19 would inform the discussion if we had a sense
20 of what timeliness meant.

21 **DR. ZIEMER:** Yeah. Well, let's -- let's get
22 the document on the floor and I'll ask Dr.
23 Melius to kick off the discussion here again,
24 and then have the opportunity for Board members
25 to in-put. Go ahead, Jim.

1 **DR. MELIUS:** I think the -- well, I guess first
2 of all, the report. I've heard no comments
3 from other Board members since yesterday when -
4 - when we discussed it. There -- I think Mr.
5 Miller last night in his public comments, or
6 late yesterday afternoon I think, raised --
7 raised two issues, and I have discussed some of
8 those issues with other Board members, that --
9 one was the -- I -- the feasibility, sort of
10 timeliness issue, which I think, you know,
11 could be addressed in this. I think there's
12 the issue of the regulations, as well as maybe
13 your legal interp-- 'terpretations, so that
14 might be better dealt with after we've had this
15 legal presentation tomorrow or whenever.
16 The other issue which is the issue of the use
17 of data from other sites as a -- for a site
18 profile. I guess Bethlehem would be an
19 example, but it's come up elsewhere, and should
20 we develop criteria guiding the use -- use of
21 such data, so forth. And actually in some of
22 my discussions other Board members have
23 mentioned they thought that was something that
24 might be appropriate for us to -- to
25 incorporate in some way. I would actually

1 think that that would require some sort of
2 further discussion, either here or possibly,
3 you know, reconvening our workgroup to work on
4 developing criteria 'cause it's not a -- it's
5 not straightforward to do. I think there's
6 some -- some pitfalls we need to -- to be aware
7 of in doing that -- doing that. So I think
8 that's where I stand now in terms of comments.

9 **DR. ZIEMER:** On the timeliness issue, right now
10 the document speaks to it more conceptually in
11 terms of the Board's interest in moving forward
12 in a timely fashion. In fact, we use -- I
13 think intentionally -- rather fuzzy terms. We
14 don't have any statements that say we must act
15 within a certain time frame. On the other
16 hand, it's clear that we do not want this to
17 stretch out.

18 Now we can be informed in terms of any legal
19 aspects of what constitutes timeliness, or
20 maybe not. The attorneys may not want to touch
21 that a bit. So --

22 **MS. HOMOKI-TITUS:** No, the only thing I can
23 tell you is --

24 **DR. ZIEMER:** -- can you give us a timely answer
25 to this question?

1 **MS. HOMOKI-TITUS:** The only thing I can tell
2 you is that I can share with you how timeliness
3 is used in the law. I can share with you how
4 it's used in the regulation. But to give you a
5 legal interpretation of it, just having been
6 asked yesterday, I cannot --

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

8 **MS. HOMOKI-TITUS:** -- we call them
9 (unintelligible) legal opinions and we don't
10 give them.

11 **DR. ZIEMER:** Right. Right, thank you. In any
12 event, I think the -- I think the document
13 could stand, in terms of philosophical view of
14 timeliness, without having the legal framework,
15 probably. But the other issue on the use of
16 data from other sites basically didn't get
17 addressed in this document. And perhaps that's
18 an add-on that we might want to include and
19 have the workgroup actually deal with that.

20 **DR. MELIUS:** Can I comment on the timeliness
21 issue?

22 **DR. ZIEMER:** You bet.

23 **DR. MELIUS:** Since we won't have a legal
24 definition of -- of it. And this is just a
25 thought, maybe. I'm not even sure I'm

1 suggesting we do it, but -- but one
2 consideration should be should we make some of
3 the language more specific in terms of what are
4 some of the situations that may arise that --
5 that would affect timeliness, and what -- what
6 are justifiable reasons for (unintelligible),
7 how -- how would we handle procedurally things
8 that the -- for example --

9 **DR. ZIEMER:** Are you thinking of cases --

10 **DR. MELIUS:** -- data -- access to --

11 **DR. ZIEMER:** -- or examples?

12 **DR. MELIUS:** Yeah, access to a dataset is not
13 possible, critical dataset that we need for
14 doing dose reconstruction is -- or is -- to --
15 in -- for evaluating for SEC purposes. That's
16 just not available. To me, that's a very
17 justifiable reason for, you know -- you know,
18 postponing action and so forth -- and that, and
19 something like that. And so it would be along
20 those lines sort of how -- how we would deal
21 with tho-- those types of issues.

22 **DR. ZIEMER:** But again, you're talking about
23 providing examples of how one might --

24 **DR. MELIUS:** Examples as opposed to -- yeah.
25 Once again, I (unintelligible) --

1 **DR. ZIEMER:** As opposed to -- (unintelligible),
2 okay.

3 **MS. HOMOKI-TITUS:** You haven't provoked
4 counsel. That was actually going to be an
5 example I was going to give, because the SEC
6 rule does speak to that specific situation.

7 **DR. WADE:** Maybe you -- maybe you can do your
8 li-- can you run through your list for us?

9 **MS. HOMOKI-TITUS:** Oh, sure.

10 **DR. WADE:** I think it'd be --

11 **MS. HOMOKI-TITUS:** What I pulled together was -
12 - out of the actual statute, timeliness is only
13 mentioned once, and it's under the purpose of
14 the program, to compensate -- it's a
15 compensation program to provide timely, uniform
16 and adequate compensation to covered employees.
17 Lew also asked me to pull the two new deadlines
18 that were added -- I think you all probably
19 know them by heart, the 180 days to make a
20 recommendation, and then the President -- which
21 has been designated to HHS -- has 30 days to
22 provide a determination to Congress, once this
23 Board provides a positive determination to the
24 Secretary. And then I was also going to let
25 you know that the SEC rule, as it currently

1 stands, and the recommended rule still includes
2 this part, gives the Director of OCAS the
3 ability to determine that records are not
4 available in the timely manner. And this will
5 be considered the same as a determination that
6 the records are not available at all. So those
7 are kind of -- those are the legal places where
8 it's actually included. And then if anyone's
9 really that interested, there's a lot of
10 preamble language discussing it that I can give
11 you copies of.

12 **DR. ZIEMER:** Okay. Thank you. Wanda and then
13 Jim and then Henry.

14 **MS. MUNN:** Both of the items that are being
15 discussed here are resource-limited. It would
16 be very nice if we had all the time that we
17 needed and if we had all of the resources
18 necessary to do all of the comparisons that we
19 need do -- to do, and nobody was upset about
20 not having their claims or their SECs moved
21 forward last week. But that doesn't apply
22 either to this Board nor to NIOSH nor to our
23 contractor. We're all resource-limited.
24 The more specific we become, the less fluid the
25 process can be. And the less fluid the process

1 can be, in many cases, the more -- the less
2 timely it is likely to be.

3 The document we have before us is pretty well-
4 written, and allows the reader to understand
5 that everyone involved would like to see
6 timeliness, would like to avoid the use of
7 surrogate sites, but when timeliness is an
8 issue and resources are an issue, we must make
9 hard choices. My personal choice would be to
10 accept the document the way it is. In the
11 interest of timeliness, I would be more than
12 willing to move it when the other Board members
13 are ready for that.

14 **DR. ZIEMER:** Thank you. Jim, did you have
15 another comment?

16 **DR. MELIUS:** Yeah, I would just -- I actually
17 was just thinking, maybe I should just stop
18 here since I've got Wanda -- unusual situation
19 -- agreeing with me on it.

20 **MR. GRIFFON:** Yeah, I was just about to say,
21 I'm willing to second it if (unintelligible).

22 **DR. ZIEMER:** Okay, we'll hear from --

23 **DR. MELIUS:** But, however --

24 **DR. ZIEMER:** However.

25 **DR. MELIUS:** I'm not taking issue, but just a

1 clarification, I would think it could be
2 helpful that if we took a little bit of time
3 and a little bit of resources among our Board
4 to try to come up with some criteria for where
5 -- how to use data from other sites. I think
6 that's --

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

8 **DR. MELIUS:** -- one that would be -- be useful
9 and would hopefully save us some time going in
10 the future.

11 **DR. ZIEMER:** All right. Henry Anderson.

12 **DR. ANDERSON:** I was only going to address a
13 different timeliness issue as -- as the
14 timeliness here is it seems to be on the front
15 end, the timeliness of getting the SEC petition
16 processed. I was just going to raise the issue
17 which came up in some of our other discussions
18 that if the determination is made that it is
19 feasible -- in other words, you're going to
20 deny the petition -- there needs to be some
21 timeliness in when will these petition -- or
22 the cases be dose reconstructed. I think one
23 of the issues was well, we can do it, but it --
24 I mean that's why we asked for examples -- but
25 they haven't really done it yet. And as we've

1 heard this morning, there's some people that --
2 for the Proving Grounds -- filed four years ago
3 and clearly somebody looked at them at some
4 time and said we can't do these, and then they
5 just sat.

6 **DR. ZIEMER:** Uh-huh.

7 **DR. ANDERSON:** And so if a determination's made
8 it can be done, it has to move --

9 **DR. ZIEMER:** Right.

10 **DR. ANDERSON:** -- and somewhere we just need to
11 recognize that there needs to be a timeliness -

12 -

13 **DR. ZIEMER:** Right.

14 **DR. ANDERSON:** -- of being able to complete the
15 cases that are waiting.

16 **DR. MELIUS:** I think we actually --

17 **DR. ZIEMER:** Other comments?

18 **DR. MELIUS:** -- we do have that on page 8,
19 so...

20 **UNIDENTIFIED:** Oh, you do? Fine.

21 **DR. MELIUS:** Yeah.

22 **DR. ZIEMER:** Now also I would point out that we
23 could, in principle, accept the document with
24 the understanding that it would be expanded as
25 needed, with additional criteria as they're

1 identified. What I'm going to suggest --
2 Well, I want to ask this question, Board
3 members. Is there anything in the presentation
4 by SC&A on what they identified as the
5 procedures for a Board SCA (sic) review,
6 anything that you see there that would cause
7 you to want to modify the workgroup document?
8 To a large extent, it's a supplement to it, and
9 more of a procedural supplement, but I do want
10 to provide that opportunity if you think any
11 changes are needed for that.

12 If not, what I'm going to suggest is that we
13 reserve any formal actions on this until our
14 work session tomorrow. That'll give you
15 additional time to think about any of the
16 parameters, as well -- yeah, when you're done
17 reading your minutes and...

18 **DR. ANDERSON:** Let's move something.

19 **DR. ZIEMER:** Well, if you want to move
20 something today, you can.

21 We also -- keep in mind -- I would suggest, if
22 you're ready to accept the document, that we do
23 it in a provisional manner, soliciting the
24 input from the Secretary's office as -- and --
25 and having a caveat that it's open to

1 additional amendments as the Board sees fit.

2 **DR. MELIUS:** I would agree with that if -- to
3 use some of my Chicago background -- if you
4 would take -- Paul, if you will take
5 responsibility for delivering Wanda's vote
6 tomorrow. I don't want her being able to
7 change her mind overnight.

8 **DR. ZIEMER:** Well -- well, let me say this. If
9 -- if you want to take action on the document
10 itself today, we can do that. I would suggest,
11 nonetheless, that we wait till tomorrow on --
12 on identifying the sites that we may wish to
13 have work done.

14 **DR. WADE:** I think it's better
15 (unintelligible).

16 **DR. ZIEMER:** If so, I'll entertain a motion for
17 provisional acceptance of the document. By
18 that I mean we would consider it our working
19 document for the time being, open to
20 modifications as -- or at least some input from
21 the Secretary's office, as well as --

22 **DR. DEHART:** Second -- I'll second Wanda's
23 motion.

24 **DR. ZIEMER:** -- as well as possible additions
25 on this issue of using other site data.

1 **DR. WADE:** Yeah, I think the -- the thought of
2 getting the working group together to -- to
3 complete that issue I think is a good thought
4 and I would hate to see that lost.

5 **DR. ZIEMER:** So that what it would do would be
6 basically to accept what we have here as a
7 starting point and keep the door open for
8 changes. If the Board is comfortable with
9 that, that would be a motion for something
10 similar.

11 **MS. MUNN:** Yes.

12 **DR. ZIEMER:** I hate to put words in other
13 people's mouth, it's a very unsanitary way of
14 speaking.

15 **MS. MUNN:** Although I'm not the chair of the
16 working group, who perhaps should move --

17 **DR. MELIUS:** I will defer -- I will gladly
18 defer to you making the motion.

19 **MS. MUNN:** Would you please record that? It's
20 a first.

21 I move that this body accept the document that
22 is before us as a provisional document, with
23 the understanding that the input of the
24 Secretary will be used to help expand the
25 document and complete it.

1 **DR. ZIEMER:** I'll interpret that as including
2 the possible expansion for other related
3 topics, as were -- if that's agreeable.

4 **MS. MUNN:** Yes.

5 **DR. ZIEMER:** And seconded by Roy DeHart. Now,
6 discussion?

7 (No responses)

8 Are you ready to vote? You're longing to vote.

9 **MS. MUNN:** Please.

10 **DR. ZIEMER:** Please vote. All in favor, aye?

11 (Affirmative responses)

12 Any opposed?

13 (No responses)

14 Any abstentions?

15 (No responses)

16 Motion carries.

17 **DR. MELIUS:** (Off microphone) Could we now read
18 back (unintelligible).

19 **DR. ZIEMER:** I believe -- now the group is
20 getting giddy. I believe that completes our
21 formal action for today. We are going to
22 return at 7:00 p.m. for a public comment
23 period. Let me ask Lew Wade if he has any
24 additional comments or instructions for us
25 before we depart. No?

1 Okay, we will recess until 7:00 p.m. Thank you
2 very much.

3 (Whereupon, a recess was taken from 5:00 p.m.
4 to 7:00 p.m.)

5 **PUBLIC COMMENT**

6 **DR. ZIEMER:** Good evening, everyone. We have
7 some folks still coming in, but I think we're
8 going to go ahead and start, try to keep on
9 schedule, if we can.

10 My name is Paul Ziemer -- oh, there are some
11 more chairs, though you may want to squeeze
12 together, at least let people know if there's a
13 chair near you. If you can squeeze together a
14 little bit, too, that can help. We'll try to
15 get some more folks in.

16 I serve as Chair of this committee. I want to
17 just take a minute or two and tell you what the
18 committee does and what we don't do. It's
19 actually an Advisory Board, and we advise the
20 Secretary of Health and Human Services on the
21 dose reconstruction program that's being
22 carried out by NIOSH, and many of you are quite
23 familiar with that program and are even
24 claimants in that program.

25 This Board is not the board -- we do not do the

1 dose reconstructions, and we are not an appeals
2 board for people who have claims that have been
3 denied. Rather we are simply an advisory board
4 to the Secretary of Health and Human Services,
5 looking over the agency's shoulder. We are not
6 part of the federal agency. We are all
7 independent folks. I'm -- I'm a retired
8 professor -- and, incidentally, a former Oak
9 Ridger -- and we are looking over the agency's
10 shoulder to determine the extent to which the
11 program is being conducted in the proper
12 fashion.

13 So we review some of the dose reconstructions
14 in an audit fashion, as it were. We review
15 site profiles and that sort of thing. And in
16 the course of our deliberations where we come
17 together periodically and hear from the agency
18 and from others how the program is going, we
19 always have an open meeting, and through the
20 open meetings we also gain information about
21 how the program is working -- or, for some
22 people, not working, as it may be.

23 But I do want you to know that if you have
24 individual concerns about your own claim or a
25 claim of a relative, there are NIOSH staff

1 people here to assist you with that. So they
2 do want to take care of the individual claims.
3 And many of you will, I'm sure, tonight tell us
4 about your experiences, and from that we learn
5 certain things about what the problems are with
6 the program, what's not working, what is
7 working and so on. So that's really what we're
8 doing here tonight.

9 Now I have a couple of lists. I have the
10 starting list here of about 15 people who've
11 asked to speak, and there's another page like
12 this, so I'm guessing there's probably about 30
13 people who have requested to speak. And
14 recognize we have scheduled about an hour and a
15 half of time, so if you are one who are --
16 that's speaking to the group tonight, you can
17 do the math there. Let's see, we've got maybe
18 30 people and 90 minutes, so it doesn't give --
19 if you're taking ten or 15 minutes, you really
20 are going to be depriving someone else of time.
21 So we ask you, to the extent you feel
22 comfortable, try to be fairly concise in what
23 you do.

24 Now when -- I'm not going to ring any bells or
25 make you sit down, but we do request that you

1 try to be as concise as you can and still
2 convey what you wish to the Board. Okay?
3 And the Board members are here. I'm not going
4 to introduce them individually. Their name
5 tags are there. They come from all parts of
6 the country. They represent worker groups,
7 technical groups and so on. We have a broad
8 representation of folks on the Board. Many of
9 them are retired, some still working, so it's a
10 cross-section of people. We -- different ones
11 have expertise in different things. All of us
12 are -- we're like anybody else, you know.
13 We're dumb in certain things and we think we're
14 smart in others, but that's how it is.
15 Okay. I'm just going to go down the list in
16 order and as you -- if you're comfortable, you
17 can stand here, there's another mike here,
18 wherever you're comfortable in addressing the
19 group will be fine. We do need -- when you
20 come up, need to have you repeat your name for
21 our court reporter -- 'cause we do keep a
22 transcript of everything that is said, and that
23 transcript does go on our web site -- so that
24 we capture the information that's presented
25 tonight.

1 So we'll begin with B. A. Austin. B. A.
2 Austin.

3 (No responses)

4 Some folks may have signed up earlier and
5 didn't arrive yet. If B. A. Austin's not here
6 yet, let's go to Gail Elkin.

7 (No responses)

8 Okay. Well, I'll come back and check on these
9 later. Jack Wolum -- Woolum, W-o-o-l-u-m --
10 Jack?

11 **MR. WOOLUM:** I've already got my questions
12 answered.

13 **DR. ZIEMER:** You got your questions answered,
14 okay, Jack. How about Jim -- I believe it may
15 be Phelps -- Jim, thank you.

16 **MR. PHELPS:** Hi, my name is Jim Phelps, for the
17 court reporter. I'm here to speak about my
18 father's experience at the Y-12 nuclear weapons
19 plant over the years. I understand that you
20 all are trying to do a dose reconstruction at a
21 plant that had probably weak records on
22 dosimetry. It also is a complicated site where
23 chemicals interfere with the free oxygen
24 radical damage of radiation. Oak Ridge is more
25 characterized as a chemical damage site than a

1 radiation damage site, and that's one of the
2 problems.
3 You say you want to use best available science.
4 Best available science in Oak Ridge says that
5 you look at the radiation, you look at the
6 mechanism for radiation. And at Oak Ridge --
7 at ORNL when I worked there, we looked at some
8 of those mechanisms way back in the '80s. And
9 what we decided is when radiation passes
10 through a medium you get free oxygen radicals.
11 These upset cells do damage to mitochondrias of
12 cells, and these react and make something
13 called superoxide dimutase enzymes, which go
14 and repair that damage. If that damage gets
15 very high, you start noticing things like
16 mycoplasmas becoming active in the persons and
17 you have to sometimes give them antibiotics to
18 have them recover from high dose radiation.
19 What happens next is you get competition for
20 the trace metals in the cell that disrupts
21 another enzyme called 2-5A RNase L, and the
22 metal that gets in competition is manganese.
23 And what happens is a mutation of that enzyme
24 from a normal 83 kilodalton weight to a 37
25 kilodalton weight. When that mutation occurs,

1 the cells can no longer defend themselves from
2 pathogens, be that pathogen mycoplasmas or the
3 complement of viruses that you'd normally see
4 in cancer tumors. When you lose that
5 mechanism, cancer viruses and bacterias can
6 take over control for the cytokine mechanisms
7 in the cells. Now that's the simple approach
8 to radiation damage.

9 We didn't stop there at ORNL back in the '80s.
10 We went and added the chemical damage vector
11 component, and one of the things we noticed was
12 that hydrogen fluoride easily enters the body
13 in places like Y-12 in their green salt
14 operation and places like the hydrolysis of UF-
15 6 released from K-25 makes HF. As people are
16 exposed to that, that's a fairly cumulative
17 poison that deposits itself in the tissues and
18 bones and gets progressively worse with age.
19 And what happens is whenever you encounter
20 aluminum in the environment, it will
21 spontaneously combine in the body to form ALF3.
22 ALF3 mimics a hormone called the thyroid
23 stimulation hormone, and when that happens you
24 no longer have the night and day variation that
25 you get that allows your body to rest at night

1 and do cellular repair. And what it seems to
2 do is deplete an enzyme called glutathione.
3 When that glutathione enzyme becomes depleted
4 in persons exposed to those kinds of chemical
5 toxins, you no longer remove the mercury from
6 your body, and several other metals. And as
7 mercury builds and it gets involved with the
8 mtDNA and causes respiration dysfunction. How
9 it makes ATP, it generates free oxygen radicals
10 that does the same sort of damage as radiation
11 pathways going through the cell.
12 So what we identified was the chemical damage
13 vector adds directly to the radiation damage
14 vector. It's probably the bigger component at
15 Y-12 from many operations and at K-25 from many
16 operations. So I attended one of your last
17 meetings over in Knoxville and the word was
18 best available science. I think that we found
19 a better available science back in the '80s at
20 ORNL that speaks to this mechanism that I just
21 pointed out to you. And I think, in terms of
22 doing dose reconstructions, that most of these
23 plants need to have the chemical vector put in
24 there, more so than probably the radiation
25 vector in many of these cases. So when you

1 just look at radiation, you're doing many of
2 these people a disservice because most of them
3 -- some of these chemicals like PCBs, uranium
4 machinists at Y-12 were, in the early days,
5 exposed to PCBs. PCBs is one of the chemicals
6 that shuts down glutathione. When you lose
7 that -- they also had a lot of mercury vapors
8 at Y-12 -- you get mercury buildup, you get
9 this reactive oxygen species damage generated
10 in your cell mitochondria and it adds to the
11 radiation component, so -- and it's usually
12 much bigger, and it's a more cumulative process
13 'cause PCBs are fairly retained, hydrogen
14 fluoride's fairly highly retained, more so than
15 some of the internalized uranium and various
16 other internalized isotopes and external
17 radiation kind of problems.

18 So that's what I wanted to point out. I would
19 like to ask that you somehow figure how to
20 include that sort of criteria in doing these
21 folks' dose assessments. It needs to go beyond
22 just radiation because, you know, in the '80s
23 we figured out this better model, this better
24 modeling system that everybody that was in the
25 national security group that I worked with that

1 was doing some -- trying to figure out what
2 went wrong in Oak Ridge -- and agreed with it.
3 It was standard available science in the 1980s.
4 It has only been proven harder and firmer and
5 difficult to ignore in this day and age.
6 So anyway, thanks for your time.

7 **DR. ZIEMER:** Thank you very much, and certainly
8 that is a challenging issue to consider. I
9 would point out to the Board that I have
10 received from Mr. Phelps a detailed copy of a
11 letter which I think delineates pretty much
12 what he has provided, and I will make sure that
13 the Board members get a copy of this, as well,
14 Mr. Phelps.

15 Oh, have we distributed that already? If not,
16 we'll make sure the Board members get copies of
17 that, as well. Thank you very much.
18 Then Otis Lee. Otis Lee?

19 **MR. LEE:** I pass.

20 **DR. ZIEMER:** Pass? Okay. T. L. Dishman.

21 **MR. DISHMAN:** Hi, I'm T. L. Dishman --

22 **DR. ZIEMER:** Dishman, okay. I said it wrong.

23 **MR. DISHMAN:** -- retired from Y-12 after 37 and
24 a half years. I'm real disturbed at this dose
25 reconstruction because after 37 and a half

1 years and wearing a dose meter for maybe ten
2 days during 37 years, I'm one that would know
3 you couldn't reconstruct my record. And I
4 think everyone in this room knows you can't
5 reconstruct records that don't exist. And
6 we've suffered with this malfeasance for all
7 these years, and we're going to continue --
8 maybe our -- maybe our speaker that just
9 finished has some good suggestions for us.
10 Maybe we'll just check your health instead of
11 your record 'cause you've got your health
12 problems, but your records don't exist. So we
13 need to not let everybody die before we say
14 gosh, that's what we should have done. It's --
15 there -- there's a sin going on here, and it's
16 a sin against these people, and it needs to be
17 corrected and it needs to be corrected very
18 soon. Thank you.

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

20 **UNIDENTIFIED:** Mr. Zimmer (sic), can they stand
21 over here?

22 **DR. ZIEMER:** Yes --

23 **UNIDENTIFIED:** (Off microphone)

24 (Unintelligible) stand over here --

25 **DR. ZIEMER:** -- maybe -- maybe, Dr. Anderson,

1 if you could help move the podium and then they

2 --

3 **UNIDENTIFIED:** (Off microphone)

4 (Unintelligible) see the (unintelligible) --

5 **DR. ZIEMER:** Yeah, sure, we can do that. We'd
6 sort of like to see their faces, too, but we're
7 facing each other. How about sideways, will
8 that help to sort of... Thank you.

9 Okay, next we have Cleveland Drummand.

10 **UNIDENTIFIED:** We want to see everybody's face.
11 Would you move the podium completely away?

12 **DR. ZIEMER:** Oh, sure, yes.

13 **UNIDENTIFIED:** We're looking at you.

14 **DR. ZIEMER:** Yes, I gotcha. Okay.

15 (Pause)

16 Cleveland Drummand?

17 **UNIDENTIFIED:** (Off microphone)

18 (Unintelligible)

19 **DR. ZIEMER:** How about Lester -- is it Branham,
20 Lester Branham?

21 **UNIDENTIFIED:** (Off microphone)

22 (Unintelligible)

23 **DR. ZIEMER:** Oh, okay. Ray Beatty? Ray
24 Beatty.

25 **MR. BEATTY:** Good evening. My name is Ray

1 Beatty. I'm a 14-year employee at the Fernald
2 site in Fernald, Ohio. I've come here tonight
3 to express some opinion as to the Board
4 membership. I was involved in the conference
5 call that you all had about a month ago, and I
6 heard of the new Board members coming on board,
7 so I intend to address that tonight, and I
8 think you saw today that there is an SEC
9 petition, number 46, for the Fernald site, and
10 this information would be very applicable to
11 that application.

12 It's in reference to Dr. James Lockey who's
13 been appointed to serve on the Advisory Board,
14 beginning with the next meeting. Having
15 attended many of these meetings, I am pleased
16 to see him here. Dr. Lockey's had extensive
17 involvement at Fernald. He serves as the
18 government's appointee to review causation
19 related to state workers compensation claims as
20 part of the Fernald Settlement Trust arising
21 out of the case David Day versus
22 (unintelligible) Industries of Ohio.

23 There's a three-physician panel for Fernald
24 workers which reviews workers' cases to
25 determine whether DOE or their contractor will

1 contest the claim. Dr. Lockey was also
2 appointed by DOE and its contractor, Lockheed-
3 Martin, to review 55 six worker claims in Oak
4 Ridge as part of the Lockey/Byrd/Freeman panel.
5 I am requesting that Dr. Lockey's conflict of
6 interest forms, his waiver letter and the
7 relevant elements of his personal financial
8 disclosure form that deal with his expert
9 witness and other government DOE contractor
10 consulting work be made public. We have no
11 interest in his personal financial matters,
12 only matters affecting public service.
13 However, he should make public a list of all
14 workers compensation or court cases -- pardon
15 me, tort cases, claims where he has been served
16 as an expert witness, whether testifying or
17 not, and involving DOE or its contractors.
18 Dr. Lockey's reportedly had consulting
19 arrangements in defense of litigation claims on
20 behalf of various industries. This, too,
21 should be disclosed as it may impact his public
22 service.
23 In addition, I would hope that Dr. Lockey will
24 have no part in any deliberations, votes,
25 reviews involving Fernald SECs, site profiles,

1 dose reconstructions or technical documents.
2 While Dr. Lockey may be a fine person and
3 someone supported, the integrity of the program
4 for Fernald workers will be impaired if he's
5 allowed to take part in any matter impacting
6 Fernald workers. NIOSH has no shortage of
7 staff that worked at Fernald who can contribute
8 to their expertise. Information posted on the
9 NIOSH web site for conflict of interest is far
10 too limited to describe the full range of
11 conflicts that should be made available. I
12 would hope that if Dr. Lockey's permission is
13 needed to disclose some of this information,
14 that he would provide the necessary permission.
15 Thank you.

16 **DR. ZIEMER:** Thank you very much, and just as a
17 general statement I'll point out that we do
18 require all of the Board members to have a
19 conflict of interest information on the web
20 site. I believe -- the new members are
21 probably not there yet, but --

22 **MR. BEATTY:** They're -- they're not there, I've
23 looked.

24 **DR. ZIEMER:** -- they're not there yet 'cause
25 they don't begin their term --

1 **MR. BEATTY:** And I have read --

2 **DR. ZIEMER:** -- till next month.

3 **MR. BEATTY:** -- each member's conflict of
4 interest and saw where a couple had a conflict
5 of interest, but this one is much more
6 extensive that I just alluded to.

7 **DR. ZIEMER:** Yes. It will certainly be on the
8 web site as soon as he begins his term, and we
9 do have a Board rule on conflict of interest
10 issues where we're not allowed to vote on sites
11 where we have those conflicts, so --

12 **MR. BEATTY:** Okay, I -- we (unintelligible)
13 that.

14 **DR. ZIEMER:** -- we appreciate your heads-up on
15 that.

16 **MR. BEATTY:** Thank you very much. Thank you.

17 **DR. ZIEMER:** Thank you. I'm having a little
18 trouble reading this one. It may be Johanna
19 Goodman, or it... Okay, good.

20 **MS. GOODMAN:** My name is Johnnie Sue Goodman.

21 **DR. ZIEMER:** Oh, Johnnie? Okay --

22 **MS. GOODMAN:** Uh-huh.

23 **DR. ZIEMER:** -- Johnnie Sue, thank you.

24 **MS. GOODMAN:** And I am here on behalf of my
25 late husband. In 1980, January of 1980 he took

1 sick all of a sudden. Now he'd been feeling
2 bad for several months, but we didn't know what
3 was wrong with him and he wasn't one to run to
4 a doctor every time he got -- got a little bit
5 under the weather. Well, in January of 1980 he
6 took a hurting right in here, right in his
7 chest. He thought maybe he had the flu or
8 something.

9 He went to the doctor over at Oak Ridge at work
10 that day. He said oh, take a couple of
11 Bufferin and you'll be okay in a few days.
12 Well, he continued to get worse for about three
13 or four days. I took him to an old doctor that
14 -- up at Concord, Dr. Malcolm -- whatever his
15 name was, but anyway, that slipped my mind just
16 then. But he said what's wrong with you? And
17 he said I -- I can't tell you, let my wife tell
18 you. So I went through the ordeal of it and he
19 said well, let's step out in the hall a few
20 minutes and I will send the nurse in to do some
21 blood work on him.

22 So he took me out in the hall and he said
23 Honey, I hate to tell you, but your husband is
24 almost dead. I said well, how -- how come? He
25 said he doesn't have any blood. He said he's

1 got leukemia in the worst way. And I said well
2 -- well, how do you know? He said well, I've
3 seen enough of it -- it's work-related.

4 I had no idea what that meant. My husband had
5 worked over there over 20 years. He had never
6 told me anything that he ever done except he
7 was an assistant general foreman in the machine
8 shop. I had no idea what he did.

9 So it -- I was in shock. Well, we got him in
10 the hospital. In 60 days he lost 60 pounds.
11 They gave him 150 pints of blood. It didn't do
12 any good. They tried every kind of chemo on
13 him they could. They -- I thought -- was
14 trying to kill him. He was so pitiful, he
15 couldn't eat. He was in misery. And on the --
16 July the 12th he passed away -- well, we buried
17 him on the 12th. He -- he died on the 9th of
18 July. He suffered death many, many times.

19 I have never got any compensation, but men like
20 that -- not only my husband, but others -- they
21 need to be repaid some way or other, and I can
22 -- I need it, and that's all I have to say.

23 **DR. ZIEMER:** Thank you. And thank you,
24 Johnnie, for sharing that with us. I know
25 that's difficult.

1 Helen -- let's see, I'm having a little trouble
2 reading the last name -- it looks like G-a-l-h-
3 s-o-n, Galhson? Probably don't have the last
4 name correct.

5 Oh, Helen G -- maybe it's an Alban or Allison -
6 - any Helens? Any Helens?

7 **DR. ANDERSON:** What's the address?

8 **DR. ZIEMER:** The address is -- okay, we're
9 getting it closer. I'm sorry, Helen, I'm just
10 having a little trouble reading this.

11 **UNIDENTIFIED:** Well, I didn't come here to
12 speak, but I'm just like her. My husband got
13 sick and didn't know what was wrong with him
14 and he only lived three months and they found
15 out he had acute leukemia. And as you say,
16 after 37 years, I think we all deserve a little
17 bit, and we're not getting too far.

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

19 **UNIDENTIFIED:** Thank you.

20 **DR. ZIEMER:** Then I have Franklin Tucker.

21 **MR. TUCKER:** Gentlemen, my name's Franklin
22 Tucker. I worked at Y-12 approximately 12
23 years before they forced me to retire back in
24 about 2001. I was a chemical operator. Now
25 you're talking about doing a reconstruction

1 claim -- or reconstruction and stuff on doses
2 and stuff like that. You're going to run into
3 some serious problems. Like other people I've
4 heard here talk about records and stuff, what
5 don't exist or what they have made up to fill
6 in gaps. I see no way of ye'uns (sic)
7 compensating for that. The whole 12 years I
8 was there working in enriched uranium and also
9 in special materials organization where the
10 chemical exposure got me, there was never no
11 study done. There was nothing done.
12 Now I have been fighting this approximately
13 three and a half years now. I went all the way
14 to President Bush because I worked on weapons
15 systems like the 88, the 87 and stuff like
16 that. And when you work in that stuff and you
17 start bleeding out the nose, and you're so sick
18 that for the next couple of days that you can
19 do nothing, something is seriously wrong. I
20 went to the Department of Energy, voiced my
21 complaint. All they said was hey, you're a
22 whistle-blower. When I finally did come down
23 sick and they told me I had to go out on long-
24 term disability, I was told by the people at
25 Vanderbilt and stuff like that that I have

1 what's called a chronic wasting of the brain.
2 My brain's dying.

3 These people -- I mean -- and since I've been
4 sick -- and this is the sad part of it, the
5 people I have run into that are so sick and
6 have to fight the system to get anything. I
7 have not been -- I mean I have been treated
8 very bad, like I said, since I become sick and
9 stuff like that.

10 Ladies and gentlemen, the thing I recommend,
11 one thing is please contact the President of
12 the United States. You can get his phone
13 number. Call him. Tell him, say you know, I
14 worked on such-and-such weapons system, and
15 that will get your atten-- his attention right
16 there, and tell him what happened. And then
17 request -- say where is a reconstruction on our
18 dosage and limits and stuff of chemical
19 operators and machinists and stuff, the two
20 people that would have been exposed the most,
21 'cause there's never been a study done. I have
22 checked.

23 That's all I have to say. Thank you.

24 **DR. ZIEMER:** Yeah, thank you very much.

25 Colleen Schotz?

1 **MS. SCHOTZ:** I'll pass.

2 **DR. ZIEMER:** Okay, thank you. Let me jump back
3 to the beginning of the list again. B. A.
4 Austin, did he come in -- or she?

5 (No responses)

6 How about Gail Elkin? I know in some cases the
7 request for public comment sheet was
8 inadvertently signed by people who thought they
9 were simply registering, so some of those may
10 have been in that category.

11 I now -- I now need the second sheet and we'll
12 -- I think the second sheet were -- were all
13 folks who came here this evening, so -- yes,
14 sir?

15 **UNIDENTIFIED:** I'd like to find out if you can
16 tell us who these people are at the table.

17 **DR. ZIEMER:** Yes, we can -- we can go around
18 the table. I indicated that these are the
19 members of the Advisory Board. Dr. Henry
20 Anderson, who's from Wisconsin -- maybe I
21 should have each one tell who they are and
22 where they work. Why don't -- Mike, why don't
23 you go ahead and -- this -- this is the
24 Advisory Board on --

25 (Whereupon, several members of the public began

1 speaking at once, without benefit of
2 microphone, rendering none of the comments
3 distinguishable enough for transcription.)

4 **DR. ZIEMER:** Sure. Sure, sure.

5 **MR. GIBSON:** Hello, my name is Michael Gibson.
6 I worked at the Mound facility,
7 (unintelligible) for Ohio for 23 years. I was
8 an electrician by trade. I was also a union
9 president for probably ten years. I was
10 appointed to the Board in August of 2002.

11 **DR. ZIEMER:** Thank you.

12 **DR. DEHART:** I'm Roy DeHart. I'm currently at
13 the Medical School of Vanderbilt. I grew up in
14 Oak Ridge. I worked at X-10 and Y-12.

15 **MR. ESPINOSA:** Richard Espinosa, currently
16 employed at Los Alamos, New Mexico. I work as
17 a sheet metal worker and chief steward for Los
18 Alamos.

19 **MR. GRIFFON:** I'm Mark Griffon, a health
20 physicist, and I'm currently involved in a lot
21 of medical surveillance programs around the DOE
22 complex.

23 **MR. PRESLEY:** Most of y'all know me. I'm Bob
24 Presley from Oak Ridge. I worked at Y-12 37
25 and a half years. I'm back out there.

1 **DR. ZIEMER:** Well, again -- I'll go ahead and
2 reintroduce myself, some weren't in here. My
3 name is Paul Ziemer. I'm a retired professor
4 from Purdue University. My area is health
5 physics, and I got my start in my career at X-
6 10 and a little bit at Y-12, as well.

7 **DR. WADE:** My name is Lewis Wade and I work for
8 NIOSH, the Centers for Disease Control. I'm
9 the Designated Federal Official on the Board
10 representing the Secretary of HHS.

11 **DR. MELIUS:** I'm Jim Melius. I'm a physician.
12 I work for the laborer's union.

13 **MS. MUNN:** I'm Wanda Munn. I'm a retired
14 nuclear engineer from Hanford.

15 **DR. ROESSLER:** Genevieve Roessler, I'm retired
16 faculty from the University of Florida. My
17 field is health physics. I'm now living in
18 Minnesota.

19 **DR. ZIEMER:** Okay, thank you. Let's continue.
20 Then we have Dorothy Thompson.

21 **MS. THOMPSON:** Well, I'm another Y-12 widow,
22 and I guess it's very clear to most of us in
23 this room that Y-12 is as dangerous as -- was
24 as dangerous, is as dangerous, I don't know
25 what the situation is -- as any other place.

1 My husband died after a five-week illness of
2 cancer in 19-- in 2001. The primary site was
3 never really discovered, as apparently that --
4 it had gone everywhere. It was an unusual
5 variant of a patocellular cancer.

6 I applied and was just recently turned down by
7 NIOSH. They gave me a 45 percent. I don't
8 think it's accurate. I don't think it's fair.
9 And I don't think it -- it's fancy algorithms
10 that fancy mathematicians have done, but I
11 don't think it tells the story.

12 My husband was employed in 1961 as a special
13 project engineer. He was in the 18-day
14 turnaround program at Y-12 where they would get
15 orders from Los Alamos or someplace to build
16 parts. He would stay out there on weekends.
17 The plant manager, Jack Case, saw that he was a
18 bright young engineer. He would stay out there
19 on weekends with a health physicist outside the
20 door and make parts, carry parts, examine
21 parts, inspect parts, and was promised that all
22 the rest -- everything else that he did not
23 work with would be buried. And he would say
24 Honey, you don't know what I've done today.
25 You don't -- don't let the kids touch my shoes,

1 don't let -- you just don't want to know what
2 I've done. But he said they put a lead apron
3 on me most of the time, and Case thinks I'm
4 really a nice young man and I've got places to
5 go. And he lost his life for Y-12.
6 Now interestingly enough, he was in this 18-day
7 turnaround program from 1961 to 1967. Our
8 first child, born in 1964, was normal. Our
9 second child, born in 1968, had a devastating,
10 etiology unknown, birth defect. Our third
11 child, born in 1970, had a devastating birth
12 defect.
13 NIOSH says it's -- oh, we received counseling
14 from the Mayo Clinic, from the University of
15 Tennessee, from Vanderbilt, and they all said
16 do not have any more children; we fear that
17 your husband's sperm has been radiated.
18 He was -- Bill was also in charge of the
19 mercury cleanup at Y-12 for a long time.
20 Gentlemen, it's not fair. The -- oh, so I went
21 to a lawyer, and the lawyer said you know, if
22 you can prove he had any other kind of cancers,
23 because of this 45 percent, you're probably
24 okay. Well, Bill did have other cancers. But
25 guess what? It took from 19-- 2001 to now,

1 2006, to get my rejection from NIOSH. And
2 guess how long doctors keep their records?
3 They've all been shredded. They've all been
4 shredded. You can call the family clinic,
5 they've all been shredded.
6 Dr. -- the doctor on -- Dr. Sharp, who did all
7 of his skin cancers, there are no more records.
8 All I have -- I have a bill. I don't know what
9 -- I don't know where to go. I don't know what
10 to do. I was told by the lawyer also that if I
11 could have proved he had worked at K-25 for as
12 long as six weeks, there would be no problem, I
13 would get the money. And it's really not about
14 the money. I lost my husband at 63, and he was
15 a good man. He worked with Bob. And -- and he
16 -- the grandchildren are without a father, my
17 brain-damaged daughter is without a father.
18 It's not fair, guys. It's -- the NIOSH simply
19 does not adequately reflect individual spikes,
20 individual incidents, and I'm told that I can't
21 question NIOSH, that the only way I would get
22 the money is if I could prove he had more
23 cancers, which is my word against your word, or
24 if he'd worked at Y-12 -- I mean if he'd worked
25 at K-25.

1 So I think somebody needs to relook at the
2 process because there's no way that dose
3 reconstruction adequately accounts for where he
4 was from 1961 to 1967. Thank you.

5 **DR. ZIEMER:** Thank you, Dorothy. Next I have
6 Thomas Duncan.

7 **MR. DUNCAN:** My name's Thomas Duncan. I met
8 y'all a few months back.

9 **DR. ZIEMER:** Yes.

10 **MR. DUNCAN:** And the only way I got to go to
11 your meeting was -- big issue, they -- you have
12 to have authorization to get off work --

13 **DR. ZIEMER:** (Unintelligible), uh-huh.

14 **MR. DUNCAN:** -- and I tried to get
15 authorization this time, they denied it. And
16 that's the reason I haven't attended any of the
17 day meetings.

18 **DR. ZIEMER:** Yeah.

19 **MR. DUNCAN:** I got five different kind of
20 cancers. I worked in 18-day turnaround for 12
21 years. It's deadly. I got in contact with
22 NIOSH -- my wife called me at work Friday and I
23 called them Friday. I got the letter they sent
24 me Saturday and read it, and of course getting
25 authorization, they told me last time through

1 labor relations and my division -- department
2 head, I have to give them opportune time and to
3 get that information for the last meeting took
4 me about three weeks for them to give me that
5 denial for the last one. And if you'd like
6 more people to attend your meetings, you know,
7 I consider it company business, you know, if
8 it's -- you're talking about Y-12. Maybe get
9 in contact with Y-12 and -- and let the people
10 off, you know. If -- if I took anything
11 besides vacation, they said it'd be
12 disciplinary action up to termination, and
13 that's from labor relations.
14 And for NIOSH, I've contacted them two or three
15 times and they said well, we'll give you a call
16 back, never hear nothing from them. And I
17 asked for some records where I attended the
18 last meeting, you know, I signed in on the
19 books, and they said yeah, we'll have them sent
20 to you, and that's been three months ago, still
21 waiting on them to send them to me.
22 I got a letter today from NIOSH on my update
23 and I've had some other body parts removed just
24 a month or so ago, and I sent them in to my
25 representation and I think -- I think I got

1 five different kind of cancers, and that make
2 the sixth one, and it's not showing up on my
3 records through NIOSH, and I don't know how
4 long it takes for them to -- you know, I been
5 fighting cancer for oh, a little better than a
6 year, and they say oh, you've got the best
7 kind. You know, it's 80 percent curable.
8 Well, I ain't reached 80 percent yet. That's
9 about all I can say.

10 **DR. ZIEMER:** I wonder if some of the NIOSH
11 staff can make sure we get the information from
12 Mr. Duncan for the records and whatever was
13 requested. There's some staffers here that can
14 help you yet tonight, I think, and try to get
15 that for you.

16 Actually with the number of people who declined
17 to -- to speak, we actually have finished the
18 list here, so I'm going to ask -- there may be
19 others who didn't sign but that do wish to
20 speak, and I'll give you the opportunity.
21 Yes, sir, please approach the mike and give us
22 your name.

23 **MR. ROYSTER:** My name's Paul Royster. My dad -
24 - some of y'all might know my dad. His name
25 was Billy Royster -- George William Royster.

1 He died in 1968. Our claim was denied for --
2 said it had 48 percent. Some of the things he
3 was involved in was he was there when the
4 atomic bomb ground testing in 1957. He was
5 involved in some experiments where he drank
6 radiated milk from cows. Frank Munger* did a
7 story about this a while back. He had
8 plutonium spilled on him, that's documented.
9 It spilled on his hands. That's documented.
10 Some of his documentation was just hand-
11 written, you know. He worked at UT Farm and he
12 also worked at Y-12. He was a health
13 physicist. We've been involved in the same --
14 same fight with these other people.
15 He also had two years of documentation that
16 couldn't be found from UT Farm. But anyway, he
17 died in 1968 when I was nine years old. He got
18 -- my mom got \$25,000 life insurance to raise
19 five kids, so I'm really here on behalf of my
20 mom. She hadn't really been involved in this
21 that much. My brother mainly has been involved
22 with this, but the case number is 1407 and the
23 dose reconstruction, 48 percent up to 50, I
24 don't see how you can vary two percent. There
25 should be a leniency there, to me. This lady

1 said 45 percent. It seems like there should be
2 like a five or ten percent one way or the
3 other, the way I see it.

4 But anyway, I haven't really been involved in
5 this that much, like I said. My brother has,
6 but like I said, the experiments with the
7 radiated milk from the cows and there were five
8 other people involved in that. I don't know
9 how long that went on, but -- then when the
10 atomic bomb was dropped and they just said put
11 some glasses on and turn your head, you know.
12 And he died of a brain tumor in 1968, but
13 that's just -- I just wanted to share that with
14 you.

15 **DR. ZIEMER:** Thank you very much. Yes, please,
16 ma'am, if you wish to...

17 **MS. ROBERTSON:** My name is Florene Robertson,
18 and I'm here on behalf of my husband, who
19 passed away almost 11 years ago. He passed
20 away with cancer of the colon and of the liver.
21 Now he worked at X-10. Some of the people
22 here may think X-10 is clean, but there are
23 contaminated areas at X-10. And there was a
24 night that he worked overtime. In fact, it was
25 on a Saturday. He went in and worked on

1 Saturday, and he called me and says I'll be a
2 little late, I'm working over. Okay, he did
3 not come home until the next morning, Sunday
4 morning. And he had been there all night long
5 doing a what they call wash-down. They had to
6 wash him down, so that man was contaminated.
7 All right. The fact that I want to tell you
8 that that area's also contaminated is that they
9 -- he was on loan at different times. He would
10 come home and I'd say well, what'd you do
11 today? He'd say oh, I worked at Y-12. So I
12 don't have any way of proving that he worked at
13 Y-12, but he did work at Y-12 and he also
14 worked at X-10, but he was classified as a
15 pipe-fitter. And in the area that he worked in
16 I'm sure was pretty safe, but he did contact
17 radiation while he was there. Thank you.

18 **DR. ZIEMER:** Thank you. Yes, ma'am, uh-huh.

19 **MS. BURGESS:** Good evening, thank you all for
20 being here. I'm here --

21 **DR. ZIEMER:** Give us your name, too, for --

22 **MS. BURGESS:** Oh, I'm sorry --

23 **DR. ZIEMER:** -- the record.

24 **MS. BURGESS:** -- my name is Gail Burgess --
25 Gail Mynant* Burgess. I'm here on behalf of my

1 father, who I lost 30 years ago to eye cancer.
2 And I have no guarantee that the records that
3 you guys are looking at are true, are factual.
4 I can't get in to see them. They've all been
5 shredded. They're missing. His medical
6 records are missing, even at M. D. Anderson
7 where he went twice. And just as a personal
8 note, I worked in the field at X-10 for Bechtel
9 National, and we took samples. I didn't get a
10 dosimeter for two years. And then when I left
11 and went back to the tower in Oak Ridge, they
12 didn't do a full body count, so they don't even
13 know how much radiation I got.
14 Tell me now -- you've got me working out there
15 12 years ago, and then my father working out
16 there 30-some-odd years, I don't understand how
17 you people are going to put it all together.
18 And how can you let this woman and this man
19 have -- be so close and not be paid? I don't
20 understand this. There's got to be another way
21 to do it.

22 **DR. ZIEMER:** Thank you, Gail, and yes, ma'am,
23 go ahead.

24 **MS. SLACKEY:** My name is Sharon
25 (unintelligible) Slackey. First of all, I want

1 to say that every one of us wouldn't be here if
2 we didn't have a story. All of them are alike.
3 I want to know what are you going to do about
4 them? Do you have any power at all to do
5 anything?

6 I had a father who is dead. He died of
7 cancerous brain tumor. He worked at Y-12.
8 They said they weren't responsible in the dose
9 reconstruction. They had many years where he
10 didn't even have a dosimeter, and yet he
11 crawled in and out of the pressure vessels at
12 9-212, and I do know what the pressure vessels
13 at 9-212 were used for because I had a son that
14 was there that was regularly exposed. Had he
15 not died in a single-car accident, he would
16 have died of cancer also.

17 I have been retired from Y-12 now for about
18 three years. I have also gone through cancer
19 and I'll tell you right now they'll probably
20 turn me down. They turned us down on our
21 father, and our father had a cancerous brain
22 tumor while he was working there. They did not
23 diagnose it until six months before he died.
24 They didn't know to look for it. But he got it
25 at Y-12. We all know that.

1 My husband was a subcontractor out there at Y-
2 12 and did -- was doing a job in the east
3 ponds. They let the -- turned the water loose
4 on him and it was hotter than a depot stove.
5 He was irradiated. He's a three-time cancer
6 survivor. There's no medical records to back
7 it up. That all happened a few years ago.
8 If you guys can do something about these
9 stories, it'll make these meetings worthwhile.
10 If you can't, I don't see why you're having
11 them.

12 **DR. ZIEMER:** Yeah. Thank you. I might -- I
13 might comment that with -- there is a sense in
14 which what we're able to do is somewhat
15 limited, but we are trying to do what we're
16 able to do, within what the law allows us to
17 do, to address some of these problems. We're
18 hopeful that in cases such as yours where there
19 are missing records that there may be alternate
20 ways to establish the situation. We will not
21 always be successful --

22 **UNIDENTIFIED:** (Off microphone)
23 (Unintelligible) disease, but you know why they
24 couldn't pay for that?

25 **DR. ZIEMER:** Yeah.

1 **UNIDENTIFIED:** He died in 1981 and he had to
2 have had the test that was given in 1993.

3 **DR. ZIEMER:** Yeah. Thank you.

4 **UNIDENTIFIED:** You're damned if you do and
5 damned if you don't.

6 **DR. ZIEMER:** Okay, ma'am -- yes, please.

7 **MS. MILLER:** Hello, my name is Kathy Miller,
8 and I'm here -- I'm also a retired nuclear
9 worker, but I'm here on behalf of my father's
10 claim. And I have -- this is not unfamiliar to
11 me, having worked in a government facility.
12 I'm caught in a bureaucratic loophole and no
13 one will take responsibility between NIOSH and
14 the Department of Labor, and I thought maybe
15 you all could find the answer to this question.
16 My father went straight from the south Pacific
17 at the end of World War II into work at Y-12,
18 and he -- this is the week of his 25th
19 anniversary of his death. He died -- he was
20 diagnosed at age 54 with multiple myeloma, and
21 he died be-- when -- he died before he was 60,
22 he died when he was 59. So my mother was
23 without his companionship and his help --
24 earning help and all those things for all those
25 years, and she filed in November of 2001. And

1 she lasted as long as she could, but she died
2 about a year ago when she was in her eighties.
3 So this is my question. My father's record,
4 I'm told by NIOSH and by the Department of
5 Labor, has been pulled as part of the special
6 dose cohort or something along that line
7 because he came to work at Y-12 in 1945. And
8 the people who are -- who were -- I believe, is
9 this correct -- worked for -- entered work from
10 '43 to '48, those records have been pulled and
11 set aside to be evaluated separately by the
12 Department of Labor. Now we've been waiting
13 since November of 2001 for my father's dose
14 reconstruction and we don't have it, so now at
15 the end of September, this law that he was
16 covered by went into effect, September 25th,
17 and at that moment or shortly thereafter NIOSH
18 pulled these records -- I think there's several
19 hundred of them -- and ceased work on the dose
20 reconstruction and forwarded them to the
21 Department of Labor.

22 Okay. They have been there at the Department
23 of Labor since that time or around the first of
24 the year -- I know how things -- slowly things
25 move. At the Department of Labor they tell me

1 they're waiting for guidelines to administer
2 this Act, and they -- I've tried to find out
3 who they're waiting on so I could say, you
4 know, could I get in touch with them, is it a
5 Congressman, is it a Senator, is it a
6 committee, is it a staff, what's the situation;
7 they don't know. And I've called back to NIOSH
8 and they say no, we're not doing it. So right
9 now, since September, all these several hundred
10 have just been sitting there, nothing's being
11 done on them. And I've called about every two
12 weeks since I found this out, and the
13 Department of Labor has no new information.
14 So I got really frustrated about two weeks ago,
15 went to Senator Lamar Alexander's office and a
16 staff person there has been very kind and been
17 trying to help me, and she's been unable to
18 find out.

19 So my question is, I'm willing to push on
20 somebody to do something if I know who it is
21 and where to go.

22 **DR. ZIEMER:** Let's see if we can find someone
23 who at least knows where she should be
24 directed, either --

25 **MS. MILLER:** I think there's 800 cases involved

1 in this.

2 **DR. ZIEMER:** Okay, right -- right here in the
3 back, from NIOSH --

4 **UNIDENTIFIED:** (Off microphone)

5 (Unintelligible)

6 **DR. ZIEMER:** -- or Department of Labor -- we
7 have both NIOSH and Labor here --

8 **MS. MILLER:** Okay, thank --

9 **DR. ZIEMER:** -- and at least someone that is in
10 the position to answer that question. Thank
11 you.

12 Okay, ma'am, please.

13 **MS. HOLT:** My name is Faye Holt. I lost my
14 husband in 1954 with cancer. And I'm concerned
15 who pays the salary for you guys to be here?

16 **DR. ZIEMER:** Let me address that --

17 **MS. HOLT:** Would all of you --

18 **DR. ZIEMER:** No -- yes.

19 **MS. HOLT:** -- like to know?

20 **DR. ZIEMER:** Yes, you would like to know that.
21 First of all, let me tell you that it does not
22 come out of the pot of money that's used to pay
23 claims. No, some people think that their claim
24 money is being used to pay people such as us.
25 It -- that's a separate pot of money and that -

1 - that money is there, regardless of whether or
2 not, for example, this Board meets.

3 These Board members are on the federal --
4 they're considered special federal employees.
5 We get paid the federal consulting rate, which
6 I can tell you is about one-tenth of the
7 commercial rate, and I don't know what -- I'll
8 tell you what I made this year in serving on
9 this Board. I made \$5,500.

10 **MS. HOLT:** Well, you have -- all of you have
11 jobs and you're just --

12 **DR. ZIEMER:** I'm retired.

13 **MS. HOLT:** -- volunteering to do this?

14 **DR. ZIEMER:** I'm retired. I'm retired, so I
15 supplemented my -- my Social Security by that
16 amount. And --

17 **MS. HOLT:** None of you then are employed by
18 NIOSH or DOL?

19 **DR. ZIEMER:** No. No.

20 **UNIDENTIFIED:** (Off microphone)

21 (Unintelligible)

22 **DR. ZIEMER:** Well, Lew -- Lew Wade is a
23 Designated Federal Official, which is a federal
24 requirement for this --

25 **MS. HOLT:** You're with NIOSH, correct?

1 **DR. WADE:** Yes.

2 **MS. HOLT:** Well, I have a question for you.

3 How can you do dose reconstruction on an

4 employee if you do not know whereabouts, what

5 building -- you know they worked at Y-12, K-25

6 and X-10, but you don't know whereabouts and in

7 what building they worked? Then how can you do

8 dose reconstruction based on coworker

9 comparison? There's no way you can do it if

10 you don't know where the man worked. He could

11 have worked up in a ceiling, he could have

12 worked under the floor. Where are you going to

13 go to get someone to compare with his case,

14 with his --

15 **DR. ZIEMER:** Let me take --

16 **MS. HOLT:** -- (unintelligible) --

17 **DR. ZIEMER:** -- Mr. (sic) Wade off the hook

18 because he is not actually a member of this

19 Board, nor is that his area of expertise. But

20 --

21 **MS. HOLT:** Well, is (unintelligible) --

22 **DR. ZIEMER:** -- in fact --

23 **MS. HOLT:** -- can answer that?

24 **DR. ZIEMER:** -- in fact, the challenge -- the

25 challenge that NIOSH has is to do what you

1 described, and if they are not able to do that,
2 then --

3 **MS. HOLT:** They estimate.

4 **DR. ZIEMER:** Well, if they --

5 **MS. HOLT:** Yes.

6 **DR. ZIEMER:** -- if they estim-- if they cannot
7 estimate within reasonable scientific bounds,
8 and one of the jobs of this committee is to ask
9 that question, whether they are in fact doing
10 that, and if they're not able to reconstruct
11 doses or make a scientifically-defendable
12 estimate, then they have to --

13 **MS. HOLT:** They assume --

14 **DR. ZIEMER:** -- place -- they have to place the
15 individual in what is called the Special
16 Exposure Cohort. And of course that really is
17 the issue that is being --

18 **MS. HOLT:** But how can they assume --

19 **DR. ZIEMER:** -- being struggled with with Y-12
20 is in fact can -- can what you describe be done
21 --

22 **MS. HOLT:** But how --

23 **DR. ZIEMER:** -- yeah.

24 **MS. HOLT:** -- can they assume that he can be
25 compared to Joe Brown when they don't know

1 where he worked?

2 **DR. ZIEMER:** That is -- that indeed is the
3 challenge. And if it can't be done --

4 **MS. HOLT:** Well, they say they know he had
5 various exposure to radiation, but they don't
6 know where he worked. So now how do they know
7 he had various exposure?

8 **DR. ZIEMER:** Well --

9 **MS. HOLT:** I mean, you know, there needs to be
10 --

11 **DR. ZIEMER:** -- we -- we --

12 **MS. HOLT:** -- some answers.

13 **DR. ZIEMER:** Actually -- and the answer is
14 actually fairly lengthy, but --

15 **MS. HOLT:** Well, I've got all the time you
16 want.

17 **DR. ZIEMER:** -- but what I was going to suggest
18 -- what I was going to suggest is that we could
19 -- we could take some time and ask, for
20 example, one of the NIOSH people to give a
21 quick overview of that process, if the group
22 would like to do that. We --

23 **MS. HOLT:** Well, all of the people that are
24 here tonight, we didn't come up here for a
25 picnic or a piece of coffeecake and --

1 **DR. ZIEMER:** Understood.

2 **MS. HOLT:** -- a cup of coffee. We came up here
3 to get some things done.

4 **DR. ZIEMER:** Right.

5 **MS. HOLT:** Well, evidently you all are not
6 doing any more than what the letters say that
7 we get, so why come to a meeting? Right?

8 **DR. ZIEMER:** I'm wondering if --

9 **MS. HOLT:** Is everyone in agreement?

10 **DR. ZIEMER:** I'm wondering if Jim Neton --

11 **MS. HOLT:** What we all need to do is join --

12 **DR. ZIEMER:** I'm going to -- I'm going to put
13 Mr. (sic) Neton on the spot. Dr. Neton is the
14 -- sort of the chief guy for NIOSH for dose
15 reconstructions, and he will describe briefly -
16 -

17 **MS. HOLT:** He's doing a terrible job.

18 **DR. ZIEMER:** Well --

19 **MS. HOLT:** No one is doing anything.

20 **DR. ZIEMER:** Well, okay, but let me tell you --
21 let me tell you, in defense of NIOSH -- and
22 again, I don't work for NIOSH -- that they have
23 in process something like 20,000 individual
24 claims. They have -- they have done dose
25 reconstructions on a little more than half of

1 those already, and obviously not everybody is
2 successful in their claim, as you might expect.
3 Some are turned down and some are not. But in
4 any event, they do --

5 **MS. HOLT:** (Off microphone) Why don't they say
6 (unintelligible) --

7 **DR. ZIEMER:** -- they do have --

8 **MS. HOLT:** -- (unintelligible), why don't they
9 say (on microphone) we do not know whether this
10 man was exposed? We know that this man was
11 exposed. We know that this man died at the age
12 of 24, after he was exposed. What else do you
13 need?

14 **DR. ZIEMER:** Our Congressmen have put in place
15 a law which mandates certain steps that we must
16 follow legally. We cannot simply say someone
17 worked at Oak Ridge and therefore they are
18 entitled to this. That's not the way --

19 **MS. HOLT:** I thought the President --

20 **DR. ZIEMER:** -- the law is written.

21 **MS. HOLT:** I thought President Reagan put that
22 into effect.

23 **DR. ZIEMER:** Well --

24 **MS. HOLT:** (Off microphone) We don't need to be
25 here (unintelligible) Washington. Right?

1 **DR. ZIEMER:** Sure. Yeah, understood. We --

2 **MS. HOLT:** (Off microphone) (Unintelligible) be
3 there when the (unintelligible) --

4 **DR. ZIEMER:** We -- sure. We -- this group is
5 doing the best it can to carry out what we are
6 legally required to do, as is NIOSH.

7 **MS. HOLT:** Okay, then why are --

8 **DR. ZIEMER:** We understand --

9 **MS. HOLT:** Why are you here tonight then? What
10 are you here for?

11 **UNIDENTIFIED:** To listen.

12 **UNIDENTIFIED:** To listen.

13 **DR. ZIEMER:** We are here to listen tonight,
14 insofar as we are -- our responsibility -- you
15 perhaps weren't here when we talked earlier,
16 but the responsibility of this Board is to
17 review what NIOSH is doing in dose
18 reconstruction --

19 **MS. HOLT:** We all know what they're doing.

20 **DR. ZIEMER:** -- and inso--

21 **MS. HOLT:** Why send you all here to tell us?

22 **DR. ZIEMER:** It -- we're here to advise the
23 Secretary of Health and Human Services, but in
24 the process, we do -- we do like to get
25 information from people such as yourself, which

1 -- which points out -- and all of this -- all
2 of this information is -- goes into the public
3 record that points out the frustrations that
4 many of you feel. That's an important
5 component. We need to -- we need to make that
6 information known, in some cases to Congressmen
7 'cause they are listening, too, and they --
8 they know these frustrations. And if the law --
9 -

10 **MS. HOLT:** Evidently no one --

11 **DR. ZIEMER:** -- if the laws need to be changed
12 --

13 **MS. HOLT:** -- no one is listening.

14 **DR. ZIEMER:** Well, we're -- we're hopeful that
15 they -- that they will. And if the laws need
16 to be changed, that process, you know, can go
17 forward. But it -- it obviously is a
18 frustrating one. You know, I -- I can tell you
19 that even the Board -- we -- we share some of
20 those frustrations, trying to do what we're
21 legally required to do. But I recog-- I
22 recognize what you're saying and, you know, we
23 really will -- are trying to do what we can to
24 -- to address those issues. They are very,
25 very difficult -- very difficult, and -- and

1 we're not saying that it's easy, particularly
2 in these cases where we really don't know. If
3 we don't know and can't find coworkers or
4 someone or groups that represent that person,
5 and when they do they make what are called
6 claimant-favorable -- you may not --

7 **MS. HOLT:** All of these people fell through the
8 cracks. There's nothing left.

9 **DR. ZIEMER:** Well, we -- yeah, we hope that
10 doesn't occur. We're trying to prevent that,
11 really, yeah, but -- thank you.

12 **MS. HOLT:** (Off microphone) All of you need to
13 this book I've got back here with all
14 (unintelligible) and all of us get together and
15 go to whoever and if we have a thousand or a
16 hundred signatures, we can get a lot done. And
17 (unintelligible) back here (unintelligible)
18 name and phone number down, we will all get
19 together.

20 **DR. ZIEMER:** Yeah. Well, you're quite right,
21 and it doesn't -- it never hurts to organize.
22 Are there others who wish to address -- yes,
23 please.

24 **UNIDENTIFIED:** I just want to make one
25 statement.

1 **DR. ZIEMER:** Yeah.

2 **UNIDENTIFIED:** I know a lady in this town
3 that's already been -- got her settlement. She
4 got it within three months, and this lady over
5 here said that from -- it took from 2001 to
6 2006 to get rejected. That doesn't make sense.

7 **DR. ZIEMER:** No, it doesn't. All right. The
8 lady here, and then the gentleman.

9 **MS. LONG:** My name is Lindsay Long. I've got -
10 -

11 **DR. ZIEMER:** I'm sorry, could you give it
12 again?

13 **MS. LONG:** Lindsay Long.

14 **DR. ZIEMER:** Okay.

15 **MS. LONG:** And I've got a couple of questions
16 for NIOSH. Is -- when the NIOSH interviewers
17 call us and they do our interview, they want to
18 hurry you up because you're taking too long to
19 explain things to them, or you're asking them
20 too many questions. They say we've got another
21 interview here in another hour. I don't
22 appreciate being hurried on and passed on to
23 the next person.

24 When you're tak-- having your appeals hearing,
25 they're trying to push you on and hurry you up

1 because they've got somebody else in an hour.
2 I don't appreciate that, either.
3 I'd like to know why there's no written record
4 of the appeals hearing. The stenographer does
5 her work, she doesn't type anything down, she
6 puts it on a cassette and then she hands it to
7 the hearing officer. She doesn't even get to
8 see what she's recorded. It goes somewhere
9 else. Why there's no official record, like
10 there would be in most courts, if this is an
11 official hearing?

12 **DR. ZIEMER:** I don't know the answer to that.
13 I think that you may be talking about a
14 Department of Labor hearing. Is that correct,
15 not a NIOSH -- yeah -- yes.

16 **MS. LONG:** I'd also like to know why, when
17 we're -- it may not be your issue, but that we
18 -- under the Freedom of Information Act, we
19 request log books and we can't get copies of
20 these records. We keep hitting brick walls,
21 even though we know where they exist, we know
22 where they are when we request them and we can
23 say where they are, but we still can't get
24 them. Why are we still hitting brick walls
25 from the Department of Energy?

1 **DR. ZIEMER:** I don't know the answer to that,
2 either. I do know that this Board has had
3 difficulty getting things from the Department
4 of Energy, also.

5 **MS. LONG:** Thank you.

6 **DR. ZIEMER:** Yes, sir -- come -- come to the
7 mike, please, so we can record.

8 **UNIDENTIFIED:** I just found out about this
9 meeting a little while ago so I'm really not
10 prepared.

11 I worked at Y-12 --

12 **DR. ZIEMER:** What's your name, sir?

13 **MR. O'NEAL:** Earl O'Neal.

14 **DR. ZIEMER:** O'Neal?

15 **MR. O'NEAL:** O'Neal, O-n-e-a-l. I left in '86
16 and I went to work for nuclear power plant, so
17 my first job was down at Barrett Power Plant in
18 Georgia. And they asked me if I ever worked in
19 nuclear and I told them yes, I worked at Y-12.
20 And they said what's your dose rate? I said I
21 have no idea, they never told me. And so he
22 said -- this is the NRC guy -- now he says I'll
23 find out. I said good -- good luck. I said
24 nobody else can find nothing out up there. So
25 I seen him a couple weeks later -- I already

1 went to work and everything -- and I asked him,
2 I said now, what -- what's my dose rate? He
3 said I don't know. I said why not? He said
4 they won't give it to us. And I said well, I
5 thought you said you was NRC, that you could
6 get anything. And he said well, we thought we
7 could, but he said we -- we can't and he said
8 we -- we're going to start you with a zero dose
9 rate. And so I worked 25 nuclear power plants
10 so I still -- I got dose now from that, plus
11 what I got over there that they wouldn't even
12 tell me about. But that's who you're working
13 against.

14 **DR. ZIEMER:** Yeah.

15 **MR. O'NEAL:** Is people that knows how to
16 shuffle things and hide things. So I just
17 wanted to get in my piece -- and I been
18 fighting them since '87.

19 **DR. ZIEMER:** Okay, thank you. Yes, ma'am.

20 **MS. BOINET:** My name's Diane Boinet. My
21 brother, Maurice Anthony Fitzpatrick, died
22 January the 25th, 2001. He worked at Y-12
23 plant for 27 years. I think the last time --
24 last job he had out there he was a expediter
25 and he died with cancer. Okay. He had never

1 been married before, no kids or anything. My
2 mother would have benefit from the program, but
3 she died December the 18th, 2004, and I got a
4 letter from NIOSH in January the 25th, 2005
5 that he had a 50 percent greater that he had
6 received his cancer from the plant, and that's
7 what I'm saying. It took so long, my mother
8 was eligible for it but she died, but the
9 program been such a hold-up and, you know,
10 people are dying off and my brother died a
11 awful death but no one will receive any money
12 because he had -- he's never been married and
13 no kids at all. And you know, I just -- it's
14 just sad that he had to die this way and nobody
15 would be able to get the money. But his -- his
16 cancer -- they did say it was 50 percent
17 greater that he received his -- his cancer from
18 working at Y-12 plant. I'm just saying, you
19 know, and I know how some other people feel,
20 too, about the delay and stuff, people dying
21 off.

22 **DR. ZIEMER:** Right.

23 **MS. BOINET:** Okay, thank you.

24 **DR. ZIEMER:** Thank you. Yes, ma'am.

25 **MS. MOODY:** I'm Shirley Moody, and I'm here for

1 my husband, Earl Moody, who passed away April
2 the 29th, 2001. He worked at Y-12 almost 20
3 years. He died of colon cancer. I have been
4 denied. He was in maintenance, which he worked
5 in nearly every plant, every building at Y-12 -
6 - around the ponds repairing fences, steam
7 plants, rad houses. And I got a letter last
8 week, they've reopened my claim, but they want
9 me to have medical records from his doctors
10 saying that his cancer was caused by radiation,
11 which no doctor -- they have told me that they
12 cannot prove that. So what do I do after the -
13 - now?

14 **DR. ZIEMER:** Okay. Again, you probably need to
15 get Ms. Moody with one of our claim people. I
16 think -- are they in the corridor still? To
17 get some -- we'll get some information for you
18 on next steps for you.

19 **MS. MOODY:** Okay, thank you.

20 **DR. ZIEMER:** Yeah, thank you. Who's back
21 there?

22 (Pause)

23 Stu Hinnefeld, can you direct Ms. Moody here?
24 Ms. Moody, look behind you there. See Mr.
25 Hinnefeld there? Get with him and get -- she

1 needs some information.

2 **MR. HINNEFELD:** Okay.

3 **DR. ZIEMER:** Yeah. Okay, sir?

4 **MR. BROWN:** I'm Dennis Brown. I'm representing
5 -- for my mother on behalf of my father. He
6 died back in 1980, worked at K-25 30-some-odd
7 years. I was there when my dad took his last
8 breath in 1980, you know. He was -- many
9 months at Four Centers* Hospital. Me and my
10 brother in college, two younger siblings at
11 home, spent a lot of days and nights at the
12 hospital. We'd rotate nights. My mother would
13 stay during the day while we'd go work out for
14 college, but like a lot of these people --
15 folks here today, percentage shouldn't matter.
16 One percent is too much, you know. These folks
17 that have 45 percent, 40 percent, whatever,
18 this -- this shouldn't be a case scenario
19 whatsoever. I know you have guidelines and
20 everything to go by, but again, he died of
21 liver cancer -- covered with liver cancer.
22 Thirty-some-odd years, you're talking about --
23 and my dad wasn't nobody big. He was a blue-
24 collar worker, but he loved what he did. A lot
25 of people loved him, you know. He was there

1 every day, very punctual, very reliable, and he
2 was -- he was -- like I said, he was a janitor
3 supervisor, you know, with five kids to raise.
4 My point to you guys is, or my question is, I'm
5 not too happy with your interactions -- you
6 know, this is what I get from y'all for the
7 last three years. I could probably cover Oak
8 Ridge with the paperwork that I have. It seems
9 like every -- every paper, they come up with a
10 different scenario, something different every
11 time. Like the lady said a while ago, the
12 thing keeps dragging on and on and on.
13 My mother -- she wasn't concerned with this. I
14 don't know what -- what year did this start,
15 the re-- reconstruction dose, what year was
16 that you guys --

17 **DR. ZIEMER:** It really started in 2001 is when
18 NIOSH got underway. I think the law -- the law
19 went into place earlier, but it wasn't --

20 **MR. BROWN:** And her thoughts to us --

21 **DR. ZIEMER:** Yeah.

22 **MR. BROWN:** -- we tried to get her to -- you
23 know, to go ahead and buy into this thing.
24 It's not going to bring him back, that's what
25 she told us.

1 **DR. ZIEMER:** Yeah.

2 **MR. BROWN:** You know, it's not going to bring
3 him -- so she wasn't too interested in -- into
4 dollars or whatever. It wasn't till -- we was
5 a late bloomer into this thing. It's been two
6 years ongoing, two or three years ongoing. It
7 was then a pastor talked her into coming up
8 here to try to do something about it.
9 But what I'm saying is, guys, it's a small
10 price to pay. My dad was 51 years old when he
11 died, 30-something years at the plant -- 30-
12 some-odd years plus. I remember when I was a
13 freshman in college, I got his watch for 30
14 years of business, you know, at the plant and
15 everything. But 15 years of his life, the rest
16 of it was spent in Oak Ridge. You know, 51
17 years old is how old he was when he died in
18 1980. So I think y'all need to be -- instead
19 of the paperwork, I think you need more
20 interaction, a lot of one-on-one with people
21 that does have these claims. And you know, let
22 them know that you care. This paperwork don't
23 mean nothing to me. And I think I'm speaking
24 for all these folks, you know.

25 **DR. ZIEMER:** Sure, understood. Uh-huh.

1 **MR. BROWN:** If you try to interact with us,
2 we'll -- everything'll be a lot better. It's a
3 small price to pay for 30-something years of
4 service.

5 **DR. ZIEMER:** Yes, sir. Thanks. Yes, ma'am,
6 sure.

7 **MS. MCKEETHAN:** Hi, I'm Diane McKeethan*. I'm
8 pretty sick, and I was pretty sick about 12
9 years ago when I worked. And before the Act
10 was ever signed I'm pretty sure I was -- I had
11 a dose, okay. I don't know what it is, but I
12 did inventory, so I know I -- I was hot.
13 Anyway, I want to know what we, as a group, can
14 do to help you guys, 'cause you're people, too.
15 And I know you see the human suffering.

16 **DR. ZIEMER:** Yes.

17 **MS. MCKEETHAN:** And I just wonder what we can
18 do, as a group, because sometimes it takes the
19 power of the people to get behind you.

20 **DR. ZIEMER:** Right.

21 **MS. MCKEETHAN:** So please tell us --

22 **DR. ZIEMER:** Yes.

23 **MS. MCKEETHAN:** -- please.

24 **DR. ZIEMER:** One -- one starting point of
25 course is sharing what -- as you have tonight.

1 That is in fact helpful for the process. It
2 may seem frustrating, but it does have an
3 impact. It has an impact on the actions of
4 this Board. It has an impact on the federal
5 staff people who operate the programs. They're
6 not all cold-hearted, really. And it does have
7 an impact I think on your legislators, who
8 really determined the ground rules on which we
9 operate. So that's a starting point.

10 Some groups do find it helpful to organize in
11 certain ways, particularly if there's some
12 political aspects that you need to -- to
13 address. But I -- you know, I can't -- I don't
14 want to get into that aspect myself, but you
15 know, what you're doing already is helpful to
16 us and we appreciate it.

17 **UNIDENTIFIED:** (Off microphone)
18 (Unintelligible) like a petition
19 (unintelligible) petition (unintelligible) or
20 (unintelligible) organization?

21 **DR. ZIEMER:** Well, of course there already is a
22 Y-12 petition that's under review, so that --
23 that is in process right now. What you're --
24 what you're doing here -- this information gets
25 shared and actually gets tracked to see -- for

1 example, issues that are being raised about
2 paperwork and so on, the -- the agency and its
3 contractor actually track this information and
4 try to determine how to address it, so that's
5 helpful, as well.

6 And sir, I think you indicated you wished to
7 address the group.

8 **MR. SCOTT:** My name's Frank Scott. I'm the
9 president of Local 900 in Oak Ridge. I'm
10 working on my 30th year at the Y-12 plant. I
11 was a chemical operator for 16 years in the 9-
12 212 area. I'm happy to report, as far as I
13 know, I'm in great health right now, so I'm not
14 here to talk about my health.

15 But the dose reconstruction -- I have been
16 involved in very -- probably more accidents in
17 the Y-12 plant than most people have when I was
18 in chemical operations, and some pretty serious
19 things went on. And I can remember a fire that
20 I was involved in where myself and some
21 coworkers were involved in a chip fire where
22 the whole room was full of contaminated smoke,
23 and one of those coworkers today I understand
24 has some very serious health problems. So you
25 know, I expect somewhere down the road I may

1 have some, too.

2 But this dose reconstruction, to think that you

3 guys can figure out how much I've had since

4 I've been out there, no way. No way.

5 Do I have confidence that the folks out there

6 have -- have gave you accurate records, even

7 the ones that you do get? No way. No way.

8 I have what is considered now probably as a --

9 as -- if -- the people out there, when you get

10 your dose record every year, most of them is

11 going to read zero. Mine don't read zero.

12 Mine reads around 300 or so, which -- which

13 even to you all, that ain't a big number. But

14 I also was involved in a program back in the

15 mid-'80s -- I was a volunteer for RadCon,

16 believe it or not, to -- their -- their effort

17 was to prove that there was no insoluble

18 uranium in the Y-12 plant so we could do less

19 testing on people for contamination purposes --

20 urinalysis, as a matter of fact. And I regret

21 that I was a part of that study because what it

22 resulted in is -- is they went from a monthly

23 urinalysis to -- to doing a urinalysis whenever

24 you went to a rad area. And shortly after

25 that, I was a representative of the chemical

1 operators at that time, and shortly after that
2 I had a man come up with unexplained Y material
3 in him, which is what we just proved we didn't
4 have any in Y-12.

5 So do I have any faith in what's going on out
6 there? No. No.

7 Do I feel like that we've had skewed records
8 because of people trying to make sure that --
9 that the folks look good that's in charge of
10 the plant? Yes.

11 If I'm a contractor and I'm out there and I get
12 numbers coming at -- going at DOE saying we've
13 got this person radiated this much, this much,
14 this much, and then I've got to turn around and
15 the folks that work -- that work for me and
16 their pay raises -- you know, I'm -- I'm
17 responsible for pay raises, they're going to --
18 they're going to skew numbers, and they do, and
19 they have, and they will.

20 My -- my saying is you will -- you will not get
21 an accurate reading. I also say if anybody's
22 really interested in what's going on with our
23 health out there, that we'll separate that and
24 put that under the Department of Health, get it
25 out from under the money that -- that's -- that

1 it -- then it probably will help that issue.
2 Thank you very much.

3 **DR. ZIEMER:** Okay. Thank you. Yes, ma'am, uh-
4 huh.

5 **MS. MANER:** (Unintelligible) microphones, but
6 I'm Valerie Maner and this is my father, Ralph
7 Delozier. I am a medical technologist and I
8 specialized in nuclear medicine. I deal with
9 radiation badges every single month. I -- we
10 haven't dealt with this reconstruction thing
11 because we're not there yet. There's no way
12 you can take -- like he was an engineer. He
13 would go out in the plant. You can't take
14 another engineer and make it the same. They
15 don't do the same things. My heart goes out to
16 these people 'cause you cannot reconstruct an
17 individual's radiation. You can't do it. You
18 cannot do that, and you know that. You're a
19 physicist. Right? You know you can't do that.
20 I know you can't do that. It's not fair.

21 **DR. ZIEMER:** Thank you. Ma'am, did you --

22 **UNIDENTIFIED:** I just want to ask a question.

23 **DR. ZIEMER:** Would you approach the mike again?
24 Sorry to make you squeeze out of there, but we
25 do need to get your name and be able to hear.

1 **MS. FOSTER:** I'm Ellen Foster. I'm here on
2 behalf of my father. He was turned down after
3 fighting for three years, and I got a letter in
4 December and it said I may have -- I may
5 request a reconsideration. It says such a
6 request must be -- must be in writing and must
7 be made within 30 days of issuance of this
8 decision. It was clearly -- it must clearly
9 state the grounds upon which reconsideration is
10 being requested. The request for re-- for
11 reconsideration should be sent to the
12 Department of Labor.

13 If there's anyone here tonight from the
14 Department of Labor, I would like to talk to
15 them.

16 **DR. ZIEMER:** Sure, there are Department of
17 Labor folks here. They may be in the corridor.

18 **DR. NETON:** Out in the hall.

19 **DR. ZIEMER:** In the hallway? Jim, can you
20 direct Ms. -- is it Foster -- to someone from
21 Labor --

22 **MS. FOSTER:** Also, and employee of NIOSH told
23 me the last time I talked to her that from 1959
24 until 1961 they did not wear badges at Y-12,
25 and my father was there. So he died of cancer,

1 but I've been denied after three years. I
2 worked there in the guard department. I was
3 injured and I -- I got hurt and they -- and
4 they say, you know, I had a body count. I
5 never had a body count and I was all over the
6 plant. I crawled around the attics, I crawled
7 around everywhere, in -- in the buildings that
8 they said was really hot, but I never had a
9 body count. I never had any kind of -- of
10 count. When I left there I didn't even have a
11 physical, so --

12 **DR. ZIEMER:** What years were you there?

13 **MS. FOSTER:** I was there from 1979 to 1990.

14 **DR. ZIEMER:** From 1979.

15 **MS. FOSTER:** And I didn't have a physical when
16 I left there so they don't know what I left out
17 of there with. So -- but I ha-- I do have
18 thyroid problems. I'm now a diabetic, and my
19 husband was there during the -- during the war.
20 He -- he was a -- he was a chemist. He was
21 supervisor out there, and now he's got
22 Alzheimer's (sic) and he's also lost his
23 hearing. They say they don't pay for the
24 hearing loss, but we spent four hours in
25 Knoxville when we got this letter saying we

1 should have the examination. Well, they said I
2 didn't have anything, but I do have diabetes
3 and I have -- I have a thyroid problem, but I
4 didn't have it until I left there. But what is
5 going to become of this -- of this thing --
6 this examination where they took it over in
7 Knoxville from ATLC? Can anyone give me an
8 answer?

9 **DR. ZIEMER:** I don't know, but if you -- if you
10 raise that issue with -- Mr. (sic) Neton can
11 perhaps direct you to where to find the answer
12 -- yes. We'll -- we'll try to help find what
13 you need.

14 **MS. FOSTER:** Thank you.

15 **DR. ZIEMER:** Yeah. Yes, ma'am.

16 **MS. ALLEN:** I'm Janice Allen and I'm acting on
17 behalf of my mother, Nancy Thomas. We -- my
18 mother was diagnosed with breast cancer and she
19 had 14 cancerous tumors in her lymph nodes.
20 They had to be removed in 2000 and we applied
21 in 2001 and they turned us down in 2004. Well,
22 since then she's done -- from the breast cancer
23 and the cancerous lymph nodes, it's done
24 spread. She has liver cancer, she has bone
25 cancer, it's in her brain and everything.

1 Well, they turned us down and I called and
2 asked them, you know -- you know, that's the
3 reason why it's -- spreads, it's from the
4 breast cancer and the lymph nodes cancer, and
5 they said well, they doubt very seriously if I
6 could reapply because that's a different case.
7 So what are you supposed to do if they turn you
8 down, they think -- I mean cancer is cancer.
9 Once you got it and it spread throughout your
10 body and -- but they're saying like well, you
11 know, that's -- that didn't happen 'cause of
12 that. And they said because of the breast
13 cancer, because the lymph node cancer, it
14 wasn't enough doses, so now that it's all
15 through her body and she's on hospice and all
16 that, they're saying like well, it's nothing --
17 no big deal, really, is what they're saying.

18 **DR. ZIEMER:** I don't think we know the answer
19 to that here at the Board table, but on
20 specific cases like that, again, you need to
21 get with one of the caseworkers and have them
22 follow up to see if there is an opportunity for
23 that to be considered.

24 **MS. ALLEN:** Thank you.

25 **DR. ZIEMER:** Yes. Sir, another comment?

1 **MR. DISHMAN:** Could I --

2 **DR. ZIEMER:** Yes.

3 **MR. DISHMAN:** Could I ask the question of who -
4 - is it Energy or Labor that is abusing these
5 people on this reconstruction? Is it Energy
6 Department or is it the Labor Department? I
7 know --

8 **DR. ZIEMER:** You'll put me on the spot.

9 **MR. DISHMAN:** -- you see, that's the problem.

10 **DR. ZIEMER:** I don't -- I don't know the --

11 **MR. DISHMAN:** It's to --

12 **DR. ZIEMER:** -- answer to that, I --

13 **MR. DISHMAN:** -- keep the hat away from these
14 people --

15 **DR. ZIEMER:** No, no.

16 **MR. DISHMAN:** -- you know.

17 **DR. ZIEMER:** We're -- we're trying --

18 **MR. DISHMAN:** It's hide the hat.

19 **DR. ZIEMER:** We are trying to find the
20 information that can be used for this --

21 **MR. DISHMAN:** But surely you know if we're --
22 when they protest, and they protest too little,
23 should they protest to the Labor Department or
24 the Energy Department? We hope the Labor
25 Department cares more about them than the

1 Energy Department because they've been down
2 that road and there's big ol' ruts running in
3 that road.

4 **DR. ZIEMER:** Yeah, yeah, I understand. I don't
5 --

6 **MR. DISHMAN:** But where does the buck stop?

7 **DR. ZIEMER:** Yeah, I don't --

8 **MR. DISHMAN:** The buck's got to stop somewhere.

9 **DR. ZIEMER:** Yeah, I don't know the answer to
10 that. We're -- we're trying to address what we
11 can. We -- we've heard many concerns here
12 tonight. We will -- you know, we're trying to
13 address those. I don't know how effective we
14 will be, but we will try. That's all I can do
15 -- tell you tonight, you know.

16 **MR. DISHMAN:** But we -- but we don't know what
17 Department we're --

18 **DR. ZIEMER:** And I'm --

19 **MR. DISHMAN:** -- having problems with.

20 **DR. ZIEMER:** -- I'm not sure. You know, if I
21 said one or the other --

22 **MR. DISHMAN:** Does some of our Board members
23 know?

24 **DR. ZIEMER:** No. Well, you know, it's like
25 who's to blame for -- I mean --

1 **MR. DISHMAN:** If you can't figure out who to
2 blame --

3 **DR. ZIEMER:** Well, you know, the --

4 **MR. DISHMAN:** -- you can't get results.

5 **DR. ZIEMER:** The problem is a complex problem
6 that has grown up over the years. I mean --

7 **MR. DISHMAN:** Well, we agree.

8 **DR. ZIEMER:** -- all of you folks -- all of you
9 folks -- and us, most of us have had nuclear
10 experience -- we -- we entered -- we entered
11 these fields really, in a sense, on behalf of
12 our country. All of you were, in a sense,
13 volunteering, in many cases. You now see that
14 you didn't know fully perhaps what the risks
15 were that you were facing, and -- and I'm not
16 even sure the agencies at that time knew those
17 themselves, and that's probably part of the
18 problem. They didn't monitor appropriately, by
19 today's standards. And we're going back and
20 trying to correct mistakes of the past, and
21 it's very difficult to do, very difficult to --

22 **MR. DISHMAN:** Please let the record show that
23 no one knew what Department this falls under.

24 **DR. ZIEMER:** Well, we know who has certain
25 responsibilities. You asked who's to blame for

1 the problems --

2 **MR. DISHMAN:** Well, who has responsibility for
3 the dose reconstruction?

4 **DR. ZIEMER:** NIOSH is responsible for
5 conducting dose reconstructions.

6 **MR. DISHMAN:** Is that under Labor?

7 **DR. ZIEMER:** No, that's under Health and Human
8 Services.

9 **MR. DISHMAN:** Health and Human Services.

10 **DR. ZIEMER:** Right.

11 **MR. DISHMAN:** It's not under --

12 **DR. ZIEMER:** Labor -- Labor's responsible for
13 verifying certain things -- the medical
14 records, the employment records and doing the
15 determination of probability of causation. So
16 those responsibilities are split. Department
17 of Energy has the responsibility for providing
18 records, and we're aware of your concern about
19 the records. So it's split up.

20 **MR. DISHMAN:** And that's why we can't ever --

21 **DR. ZIEMER:** We understand.

22 **MR. DISHMAN:** Thank you.

23 **DR. ZIEMER:** A gentleman over here on my left.

24 **MR. RUSSELL:** My name is M. L. Russell. My
25 previous badge number's 29562. I'm a sick

1 worker. I was one of the original ten that
2 signed up on this program. That was back in
3 2000, signed up again in 2001, still haven't
4 gotten any results yet. That's been five
5 years. I had Drs. Lockey and Byrd sign that my
6 exposures came from work. It was supposed to
7 have put me on through. Still haven't heard
8 anything from it.

9 Everything that we've given -- I've given
10 repeat documents time and time again, and a lot
11 of people wonder how they've been exposed to
12 things. That right there is DOE's own
13 documents. That's Rifle Range UF-6 explosion
14 test, which people can see just the things that
15 went on in your back yard that you didn't even
16 know about, just showing that there was a
17 little test that went on that people didn't
18 know. And such things as the cooling towers
19 that people drove through in the mornings that
20 the fog was so thick that they couldn't see
21 where they was going. If you go back and you
22 check your calculations on what they checked
23 just for the chromium on the towers, you'll
24 find that they calculated that incorrectly.
25 They calculated it for one tower, not out of

1 all of them.

2 It's your own DOE documents that everybody has
3 that they know it's there, but yet when people
4 comes to them with them that I've presented it
5 time and time again -- cross-water connections,
6 I was on a committee for it. All of a sudden,
7 the funding for it ended. It never got
8 addressed. It was supposed to be handled by
9 an independent agent. It got shut down.
10 Time and time again we've showed that the
11 problem exists, but it's another panel, a
12 different panel, different people, more sick
13 workers. Information just gets recorded and
14 don't get handed down. I've had several
15 surgeries. I hope I make it past all of them,
16 but these people are just getting the runaround
17 like everybody has. Look at the documentation
18 that people's using you. Let's see some
19 results.

20 **DR. ZIEMER:** Thank you. Yes, ma'am.

21 **MS. THOMPSON:** I'm sorry, I just have two more
22 comments. Number one --

23 **DR. ZIEMER:** Give your name again --

24 **MS. THOMPSON:** Oh, Dorothy Thompson. I'm told
25 that you cannot question NIOSH's dose

1 reconstruction. Is that correct? If you go to
2 an appeal --

3 **DR. ZIEMER:** I think you can always question
4 (unintelligible) --

5 **MS. THOMPSON:** No, if you go to an appeal, you
6 cannot question NIOSH's dose reconstruction.

7 **DR. ZIEMER:** Oh, the -- yeah, the appeal -- the
8 appeals are through the Labor Department, so
9 Labor --

10 **MS. THOMPSON:** Is that right --

11 **DR. ZIEMER:** Yes.

12 **MS. THOMPSON:** -- Dr. Wade? Even though we
13 know that their estimates -- that they're
14 invalid, that they're inaccurate and that
15 they're only estimates, we can't question them.
16 That's pretty presumptuous.

17 Then secondly, it's my understanding, Mr. -- is
18 it Dishman? -- that we are to blame our own
19 state senators for not joining the original
20 bill -- and correct me if I'm wrong -- that put
21 Y-12 into the group that could claim these
22 things without dose reconstruction. Is that
23 right?

24 **DR. ZIEMER:** I -- I'm not --

25 **MS. THOMPSON:** The Kentucky senators, the --

1 DR. ZIEMER: -- I'm not suggesting --

2 MS. THOMPSON: -- Ohio senators --

3 DR. ZIEMER: -- you blame your state senators
4 for what they may or may not have done --

5 MS. THOMPSON: Well, it may have been an
6 oversight at the time, but at any rate, Y-12
7 was not put into the original document -- tell
8 me what the -- that's true, that it was not put
9 in as a special group like Paducah and
10 Portsmouth.

11 DR. ZIEMER: Right.

12 MS. THOMPSON: Okay. So that's who we really
13 should --

14 DR. ZIEMER: And I -- I don't --

15 MS. THOMPSON: -- be after.

16 DR. ZIEMER: -- think this Board really knows
17 the workings of Congress in that case, what --
18 what factors went into the original
19 determination of who was or wasn't in the --

20 MS. THOMPSON: It's my understanding --

21 DR. ZIEMER: -- cohort.

22 MS. THOMPSON: -- that the Tennessee senators
23 were not in there fighting for Y-12.

24 DR. ZIEMER: I don't know the answer to that.

25 MS. THOMPSON: Are any of the representatives

1 here tonight?

2 **UNIDENTIFIED:** Of course not.

3 **DR. ZIEMER:** Yes, sir.

4 **UNIDENTIFIED:** (Off microphone)

5 (Unintelligible)

6 **DR. ZIEMER:** Mr. Elliott from NIOSH --

7 **MR. ELLIOTT:** Let me answer your earlier
8 question, though. Once you receive a dose
9 reconstruction from NIOSH, you are asked
10 whether or not you have any additional
11 information or not to provide. You're asked to
12 fill out -- sign the OCAS-1 form, and then it
13 goes over to Department of Labor. You can
14 appeal on the dose reconstruction as to whether
15 or not we applied the methods appropriately.
16 You can question the application of
17 methodology. You can't question the methods
18 themselves.

19 The Board is charged with evaluating our
20 methodology and working on that, so just -- I
21 wanted to answer your question about what you
22 can appeal on. Okay?

23 **UNIDENTIFIED:** (Off microphone)

24 (Unintelligible)

25 **MR. ELLIOTT:** You can appeal on whether our

1 methods were applied appropriately. You can't
2 question methodologies.

3 **UNIDENTIFIED:** Why?

4 **MR. ELLIOTT:** I'm sorry, that's just the way
5 the law is written.

6 **DR. ZIEMER:** Okay. Sir.

7 **UNIDENTIFIED:** (Off microphone)
8 (Unintelligible)

9 **DR. ZIEMER:** There's a law that specifies how
10 they are to do dose reconstructions, basically,
11 is what is being said. And -- and if they
12 don't -- if they don't apply that law
13 correctly, that can be --

14 **MR. ELLIOTT:** We were required by law to
15 provide recommendations in regulations on how
16 we go about doing dose reconstructions. Those
17 regulations were reviewed. You can comment on
18 the regulations. But once you have a dose
19 reconstruction, the Department of Labor
20 regulations and our regulations in NIOSH only
21 allow appeal on whether or not the dose
22 reconstruction methodologies were applied
23 appropriately, not on the methodologies
24 themselves. I know it's confusing, but I
25 wanted to answer your question 'cause I felt

1 you didn't get an answer to it earlier.

2 **UNIDENTIFIED:** (Off microphone)

3 (Unintelligible) understand what you're talking
4 about here.

5 **DR. ZIEMER:** Okay. Sir, go ahead.

6 **MR. LEE:** My name's Otis Lee. I passed on the
7 first go-around. I may or may not have a dog
8 in the fight here tonight. I've noticed some
9 of the crowd has left, but I'd like to comment
10 just a little bit. I retired from DOE with
11 about 23 years. I was a courier, nuclear
12 transport special agent, and I would like to
13 say that this -- it just -- from listening to
14 these horror stories, it appears that the NIOSH
15 reconstruction is some sort of a dog going down
16 a rabbit trail looking for a scapegoat and I
17 don't quite see -- you cannot dispute
18 scientific methodology and things of that. I
19 mean what's -- two and two is four. But when
20 you have -- you're trying to use a
21 reconstruction as a litmus for folks who -- a
22 litmus test for folks who haven't even worn
23 dosimer (sic) badges, so it's -- it's an
24 invalid method of trying to say you -- you do
25 or do not qualify as to -- for this 50 percent

1 situation because people weren't there.
2 So not meaning to make waves, but many folks
3 are familiar with the Love Canal/Erin
4 Brockovich situation, and I don't know if a
5 class action lawsuit would be more appropriate
6 to get power to the people or not, but I'm just
7 saying that perhaps that may be some help.
8 I know that situations I was involved in as a
9 transportation security specialist, there were
10 many times health physics folks would come out,
11 they would find contamination and tell us all
12 to leave, go up here, and then next thing you
13 know, it's all clear, and we'd be setting off
14 alarms and things of that nature. We had a
15 staging area in the middle of a contaminated
16 area that we would wait for shipments and
17 things of that nature. So a lot of the -- the
18 situations we were in were very -- just iffy,
19 we just did not know what we were getting
20 exposed to. So -- but I would encourage those
21 folks to sign that little ledger that the lady
22 has sent around and perhaps we'll all get in
23 touch and maybe we can -- maybe we may be able
24 to have more muscle than what you folks have.
25 So thank you.

1 **DR. ZIEMER:** Okay, thank you. Yes, ma'am.

2 **UNIDENTIFIED:** (Off microphone)

3 (Unintelligible) I didn't get your names and
4 phone numbers. My name is Faye Holt. My phone
5 number is 865-882-5618.

6 **DR. ZIEMER:** Okay. Thank you. Go ahead,
7 ma'am.

8 **UNIDENTIFIED:** (Off microphone)

9 (Unintelligible) leave your name and number
10 (unintelligible).

11 **MS. KILEY:** I'll make this very brief. I'm
12 representing my father's case. His file number
13 is 420055522. His name is Clifton O'Neal.

14 **DR. ZIEMER:** And your name is --

15 **MS. KILEY:** Is Debra.

16 **DR. ZIEMER:** Debra O'Neal?

17 **MS. KILEY:** Debra Kiley.

18 **DR. ZIEMER:** Debra Kiley.

19 **MS. KILEY:** Yes.

20 **UNIDENTIFIED:** (Off microphone) Ma'am, can you
21 stand (unintelligible) to the microphone --

22 **MS. KILEY:** Yes, I will.

23 **UNIDENTIFIED:** -- (unintelligible) hear you?

24 **MS. KILEY:** Yes. Back to our dose
25 reconstruction, as usual. You know, I did some

1 research on this, as you can see. I work in
2 the medical field, and my father had metastatic
3 adenocarcinoma of the rectum. He didn't have
4 just a few sites, but he had five primary sites
5 of cancer. And you know, based on data from
6 the American Cancer Society, cancer facts and
7 figures 2005, the probability that cancer will
8 result from radiation exposure increases as the
9 dose increases. And NIOSH dosimetry
10 calculations for my father, based on their
11 findings, the District Office calculated the
12 probability of causation for rectal cancer and
13 determined that the probability that the cancer
14 was caused by exposure to radiation during
15 employment is 10.03 percent. And he worked out
16 there nearly 30 years as a machinist. He began
17 employment in '54 at age 35 and in 81 he was
18 age 63 and ten months later he was diagnosed
19 with final stage cancer. And ten percent, hmm.
20 When I looked back at all the information that
21 I was given, the determination is made based
22 upon guidelines also developed by NIOSH, and
23 incorporated into an interactive computer
24 program that OWCP uses to calculate the
25 probability that a claimant's cancer was caused

1 by exposure to radiation. Whatever your
2 methodology is for that, you know, we need it
3 in laymen's terms and I agree with -- there was
4 a young man who spoke earlier -- it's not a
5 percentage. Any -- any amount of exposure is
6 over-exposure, and it is not -- it's just not
7 even feasible that this is going on. We know
8 of a secretary at K-25 who got compensated, and
9 my father was a machinist who -- he ground
10 uranium, and please explain this to me and take
11 this back to whomever it is necessary. Thank
12 you.

13 **DR. ZIEMER:** Thank you. Yes, sir.

14 **MR. DELOZIER:** I'm Martin Delozier. This is my
15 father over here. I didn't come prepared to
16 talk tonight, but he worked at the plants, I
17 also worked at the plants for ten years. Just
18 to give you a quick history of what I did, I
19 was -- when I first started at the plants I
20 worked at the -- down at K-25. My job was --
21 when I first got there was take the Geiger
22 counters -- they brought equipment out of the
23 plant, to test what the radiation level was,
24 whether it went to this yard or this yard or
25 this yard.

1 But all that aside, what I'm -- want I want to
2 say here and try to get an understanding of
3 what we're supposed to do. We're looking for
4 information to turn in to you guys to request
5 or whatever, and ask for medical records which
6 these people cannot get from the plants, very,
7 very difficult. You've admitted yourself that
8 you have trouble getting them. Just looking
9 for some guidance what to do.

10 Also, some of the other things that you're
11 looking for, by everybody's admittance, you
12 just have trouble getting this information. So
13 to help these people find out what we need to
14 do next, we're looking for some answers from
15 you guys. And if you don't have the answers,
16 these people are lost. And we're looking for
17 answers from you all. That's what these
18 meetings are for, answers from you guys to tell
19 us what to do, what papers to fill out, how to
20 get the papers if we can't get them and you
21 can't get them. And to reconstruct the dose
22 things, as everybody knows, is impossible. I
23 mean I worked out there and never had a dose
24 meter.

25 **DR. ZIEMER:** Right. NIOSH has people on deck

1 here to help with individual cases such as
2 yours, so you need to --

3 **MR. DELOZIER:** Well, it's not indi-- I'm just
4 looking for information for the whole people.
5 Tell us where to go next --

6 **DR. ZIEMER:** Oh --

7 **MR. DELOZIER:** -- 'cause you're requiring
8 information that we cannot get. You're
9 requiring information that can't be done.

10 **DR. ZIEMER:** Right.

11 **MR. DELOZIER:** I mean like my father had cancer
12 and the records were shredded seven years ago,
13 just like other people here. I mean we've got
14 a new instance of it now and we do now have
15 current records. He's -- 7th of this next
16 month he's going for surgery. So that'll help
17 a little bit there, but we're looking for
18 general information for everybody as what steps
19 do people need to do since they're up against a
20 brick wall.

21 **DR. ZIEMER:** Right.

22 **MR. DELOZIER:** And they cannot get anything --
23 cannot do anything. We're spinning our wheels
24 and going nowhere but backwards. And that's
25 what the answers we're looking for. Thank you.

1 **DR. ZIEMER:** Thank you. Yes, right here, sir.

2 **MR. HACKWORTH:** My name is James Hackworth.

3 I'd like to commend the panel in regard to the
4 composition of the panel. I think it's

5 admirable that you have people from the hourly

6 workers as well as professors and a -- and a

7 variety of people. That's -- that's required.

8 That's good.

9 But I would like to say this in -- in regard to

10 being able to reconstruct a -- a dosage over a

11 period of years, whether it be at K-25, Y-12,

12 X-10, Fernald, wherever it may be. Here is

13 some of the problems that there's been a lot of

14 encountering -- my friends, other folks, many

15 of them are dead, but here -- here is -- almost

16 each and every one encounters. If you go back

17 to 1943 when it first began, I had a brother

18 that worked at Y-12 initially and in regard to

19 the -- oh, golly, I can't think of the name --

20 the initial production in Y-12. But here's

21 what a lot of folks are encountering (sic).

22 There was no records kept prior to 1950 at Y-

23 12. I think a lot of these folks know that.

24 So here's -- here is a huge question question

25 that I've got. How can you possibly go back

1 and reconstruct something unless you talk to a
2 lot of these people that have been there? Many
3 of these people are dead. You cannot go back
4 and give those people a name to come back and
5 talk with. Okay? So therefore, I would -- I
6 would like for the gentleman to explain how
7 they reconstruct with no records.

8 Another point I'd like to make perhaps some of
9 the folks are not aware of, the dose rates have
10 changed over the years. I started working in
11 1951. The allowable dosage rate was much
12 higher then than it is today. Now there's
13 another thing that should be taken into
14 consideration, and -- and I hope -- I hope it
15 is. But if it hasn't been, it needs to be
16 implemented.

17 So, you know, here these people say no
18 dosimeters, no -- everyone had a badge -- film
19 badge of some sort, but I -- I would agree
20 there's -- there's many, many people that did
21 not wear dosimeters that should have been.

22 Another problem area that we have in regard to
23 being able to produce adequate records for
24 their defense -- or not their defense, for
25 their record or their loved ones' record -- is

1 the fact that I do not feel that the
2 contractors got -- they should not be allowed
3 to get away with not some involvement in this.
4 Okay? Because they had the responsibility to
5 see that these industrial hygienes, health
6 physics and the other programs to protect the
7 workers were carried out. They did an
8 inadequate job. There is no question about it.
9 So therefore, the burden is coming back to the
10 individuals to -- to prove something that's --
11 that's impossible to prove.

12 Now I understand the gentleman and his
13 calculations and methodology, the whole bit.
14 But there's a big element missing -- no
15 records, 1943 to 1950. So pray tell me, how
16 can you go back and calculate something to non-
17 existent records? They do not know the
18 buildings he worked in, the level of activities
19 these individuals were working, and the dosage
20 rate they were in. Huge problem, gentlemen.

21 **DR. ZIEMER:** Well, let me give you the quick
22 answer. If there are no records, no monitoring
23 records, no dosimetry records and no records of
24 what sources were present, then dose cannot be
25 reconstructed, and that would be the basis for

1 a Special Exposure Cohort, though.

2 **MR. HACKWORTH:** Yet these folks -- yet they
3 died of the various type cancers.

4 **DR. ZIEMER:** Right.

5 **MR. HACKWORTH:** Okay?

6 **DR. ZIEMER:** So there -- and there very well
7 may be groups, depending on the years and the
8 locations, where that is the case. And if that
9 is the case --

10 **MR. HACKWORTH:** That is very much the case.

11 **DR. ZIEMER:** Yeah, right.

12 **MR. HACKWORTH:** Many of those folks are
13 deceased.

14 I would like to just -- one -- (unintelligible)
15 one final message. Okay?

16 **DR. ZIEMER:** Okay.

17 **MR. HACKWORTH:** Mr. (sic) Wade, I understand
18 that you -- you run back and reporting to Human
19 Services. Is that -- that's your
20 responsibility. Is that correct?

21 **DR. WADE:** Correct.

22 **MR. HACKWORTH:** Okay. You heard the -- you
23 heard the voices of the people tonight. You
24 heard other meetings, perhaps. It's -- I'm
25 going to kind of quote a little bit from

1 another person that made a statement one time.
2 You heard the message. You heard the people
3 and their statements. Their statements do fit,
4 so you should go back and tell your folks to
5 submit.

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

7 **MR. HACKWORTH:** Thank you.

8 **DR. ZIEMER:** The hour's growing late and I see
9 many people are leaving. I feel like perhaps
10 we should officially come to a close -- well,
11 we have one --

12 **UNIDENTIFIED:** May I say something?

13 **DR. ZIEMER:** You certainly may. Please come to
14 the mike. I don't want to call it off too
15 soon, but I know many folks are leaving and
16 that indicates --

17 **MR. BOWERS:** I'm Leonard Bowers. I spent 44
18 years at Y-12. Most of these people out here
19 I've worked with. I'm now 76 years old. I
20 came to Oak Ridge High School when I was 14
21 years old. This creek here -- creek behind
22 this building, I used to play in it when I was
23 a child. Then when I went to work in Y-12 in -
24 - in 1950, I saw what went in that creek, and I
25 used to wade there and swim in this creek out

1 here. And then finally they build a settlement
2 pond out there. But this gentleman that just
3 spoke a few minutes ago, he was trying to think
4 of the Tennessee Eastman Corporation. Now
5 they're the people that had the records back
6 then. They're out of Kingsport.
7 Now I'm an old-timer out here, and I still have
8 my memory. But what these people have gone
9 through with -- I worked in the mercury, I
10 waded in it. I've left out there when my shoes
11 were so hot that they would -- that they'd take
12 them up and we'd wear little soft shoes to the
13 change-out, and they disregarded safety
14 altogether.
15 When the tiger team came in from Washington,
16 you know, they shut the plant down out there.
17 And one of these gentlemen came in my lab -- by
18 the way, I made printed circuit boards and I've
19 dealt with gold, I've dealt with platinum, you
20 name it, I worked in Y-12 from one end to the
21 other. I went to work there in 1950 and that's
22 when we was taking the silver out of the
23 tracks. I was a crane operator. I served my
24 apprenticeship out there, and I left and I went
25 into the military and I spent four years in the

1 Air Force and came back. And while I was gone,
2 my raises went on, my seniority went on.
3 But we'll get back to some of the things that
4 these people have lived with. Let me tell you,
5 right now -- I just found out recently -- I
6 went to the Welmouth School. I didn't come
7 prepared to speak to night or anything. But I
8 have just got a report back and the lady, she
9 was out of Nashville that did these tests on
10 me, and when she first looked at my fingers she
11 said Mr. Bowers, she said you've got heavy
12 metals in your body. Well, right out in the
13 car right now I've got -- I've got the stuff
14 out there, and the rating -- like arsenic,
15 beryllium, mercury, sodium, potassium -- I
16 worked with all that stuff. And I start
17 tomorrow for tests to find out about these
18 metals that's in my body.

19 But I know what these people went through. I
20 was there. I spent six and a half years on the
21 Brigger* reactor, until President Carter shut
22 us down. I spent 12 and a half years in
23 biology. Now I've been around some very smart
24 people in this world, and I went all over that
25 plant from building to building, and I've got

1 pictures of things that I worked with. We
2 worked with asbestos and back in the very
3 beginning we worked with carbon tet. That's
4 what we cleaned electrical parts with.

5 **DR. ZIEMER:** Sure.

6 **MR. BOWERS:** When the tiger team came in, do
7 you know they shut my lab down, and the
8 gentleman -- he left me his card; I don't know
9 if I still have it or not at the house -- but
10 they were giving me a hard time in that plant,
11 and he set down and he talked to me, and I told
12 him -- well, what they did, they condemned that
13 lab. When you process printed circuit boards,
14 you gold plate, and that gives off phosgene
15 gas. The roof -- there was one man, he came in
16 my lab and he said Leonard, he said I was up
17 there at the bus stop going to the cafeteria
18 and he said I looked up there on that roof, he
19 said I could see it, there's a big hole in your
20 roof. I said what? He said there's no
21 exhaust. Now I won't go into details, it's
22 late and a lot of you people have talked, but
23 I've been from one end of that plant to the
24 other. I've worked in every building out
25 there. I've worked with some of the smartest

1 scientists in the world.
2 And it's been the educational -- I've put my
3 hands down in centrifuge that were so hot that
4 -- that they would leave with it. Well, I'll
5 give you example. Back -- let's see, this
6 would have been 1959, was working 9201-2,
7 foreman. I asked him for 200 amp disconnect
8 switch. Well, he was a retired colonel, and I
9 asked him when he came up to me and I told him
10 what I needed. I thought he'd order me a
11 switch. Well, he comes wagging one back and I
12 said -- well, his last name started with a K,
13 I'll just call him Mr. K. -- I said Mr. K.,
14 where did you get this switch? Back on the
15 mezzanine. And I said has health physics
16 checked it? He says are they supposed to? I
17 said yes, and so we call health physics in and
18 a fella -- his initials were D.W., he's dead
19 now -- and they put him on to wash that switch.
20 Now this was a switch we was going to put on
21 out in the hall. So what does he do? When the
22 health physics man gets down there, he puts his
23 Geiger counter on it and Mr. -- well, Mr. W.,
24 I'll call him -- he washed that thing for four
25 hours, and when the health physics man came

1 back he said send it to the burial grounds.
2 And another thing I can tell you that went on
3 out there -- I'm an old-timer, and I'd like to
4 share this with you.

5 **DR. ZIEMER:** Okay. Remember now, folks are
6 getting tired.

7 **MR. BOWERS:** No, this is -- this is the last.
8 In 19-- this would have been 1955. Many of
9 y'all know Charlie Robertson, don't you, that
10 died. I was Charlie's apprentice. We worked
11 together over a year, and we went in 9201-1 and
12 we were on the second floor and here I am, I
13 just got back from the service, and the guys
14 were talking that they had connected the
15 thorium line to the drinking water fountain.
16 Yes. Now I don't know if it was actually
17 turned on or not. We just said let's get out
18 of here.

19 So I didn't come prepared to talk tonight, but
20 like I say, I go way back. And when -- I was a
21 usher at the Grove Theater back in the '40s,
22 and that's my picture in the paper y'all see
23 which says "The Atomic Bomb, the Beginning or
24 the End?" That's me when I was 16 years old,
25 and I know what has gone on. And I lose my

1 trend (sic) of thought sometimes, but it's been
2 interesting. I love living in Oak Ridge. I
3 graduated in 1947, and I've been around quite a
4 bit. But these people here, I don't know what
5 -- if I have problems or not, but you name it,
6 I know more about Oak Ridge than any of y'all
7 in this room because when you was an
8 electrician in Y-12 you would go from one end
9 to the other, that plant. You never knew where
10 you were going on overtime. And these people
11 are hurting. I've worked with them -- well,
12 you spoke of Jack Case a little while ago.
13 Well, Wayne Wallace was his first -- was his
14 first wife, and Wayne -- I was working with
15 him, and he developed this problem down in
16 Alpha 5 in the mercury. And I felt sorry --
17 she did get a settlement, I believe.
18 But like I say, I worked with many of them out
19 there. I worked with Herman Postman, how many
20 of y'all know Herman? Well, I started with
21 Herman back when he first came here. He was 26
22 years old and he worked in 9204-3, and I went
23 down and hooked up his vacuum pumps and I made
24 a prediction. I said there's a young man
25 downstairs that's going to go up in this

1 company, and he went to the top. He became a
2 vice president.
3 But we had a lot of things we shared together.
4 We worked on the DCX program. You name it, I
5 worked on it. Every time they'd run out of
6 money, I'd go somewhere else, and these people
7 -- I worked with some of the finest people in
8 this world. And these people right here, I've
9 worked with them. I've changed the motors out
10 for them, their lights and all. But I'm just
11 proud to be an American. And what I like most
12 about when I was out there, many of them
13 dreaded going -- taking a lie detector test,
14 known as the polygraph test. I thought it was
15 a honor to go up there and take that polygraph
16 test, that I was a red-blooded American and I
17 was proud of this country, and that's when I
18 went in the service and then I saw things
19 change. And the man who was head of security
20 out there and he was head of all the guard
21 department, and I used to sit in his lap when I
22 was a little boy. He lived with us at Tellico
23 Plains, and I would -- he would tell these
24 stories. But he was one of the finest men --
25 well, he is dead now, but I didn't mean to talk

1 so long, but I just came in here and just heard
2 these people, and I know how they're hurting.
3 And I appreciate any help that y'all can give
4 them.

5 **DR. ZIEMER:** Sounds like a good note to end our
6 evening on. Thank you very much for sharing
7 that. Thank all of you for coming tonight and
8 sharing with the Board. We appreciate it.
9 We will be meeting again all day tomorrow.
10 You're welcome to return and learn more about
11 the dose reconstruction process.

12 (Whereupon, the meeting was adjourned at 9:10
13 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 January 25, 2006; 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 7th day of March, 2006.

STEVEN RAY GREEN, CCR**CERTIFIED MERIT COURT REPORTER****CERTIFICATE NUMBER: A-2102**