

1 dose, if we increase doses for some of these --
2 or at least evaluate, based on increases from
3 some of Joyce's comments versus the decrease
4 that would be caused by the highest ten, if
5 we're not acceptable to say okay, we're good to
6 go as-is.

7 **DR. NETON:** Yeah, we're thinking on the fly
8 here, and I think maybe -- my thought was --
9 behind this is that we -- we have to have some
10 empirical thought process between why is say
11 160 nanocuries bounding and if -- for a non-
12 monitored worker who probably shouldn't have
13 been monitored and -- you know, I'll use the
14 extreme as an example; the administrative
15 support staff, secretarial type, who barely
16 entered the production environment -- I think
17 we can build the argument in this few
18 paragraphs as to why it's unlikely that this
19 person who was not on the production lines, not
20 opening drums, not doing the real mechanical
21 processes, would fall in that category. I
22 think we need to build that case.

23 **MR. GRIFFON:** Well, and Jim -- Jim, your
24 comment was kind of leading to what I've been
25 thinking, which is, you know, is -- is coworker

1 model for Savannah River being developed that's
2 consistent with Y-12 and Mallinckrodt and, you
3 know, that -- that sort of approach that you've
4 been using at many of the other sites.

5 **DR. NETON:** Yeah, and I -- I thought that there
6 was some efforts going down that path -- maybe
7 we're not as close or far along as I -- as I
8 had thought, but -- and that would -- that
9 would be the ultimate, I think, 'cause then we
10 could compare it to the monitoring data that
11 are out there. And in fact this is kind of
12 what we try to do. I mean rather than resort
13 to coworker distributions, you take the highest
14 five intakes that were assigned and -- and
15 almost by definition those are going to fall
16 somewhere in the coworker -- you know, the high
17 end of the -- the very high end of the coworker
18 model. It's just, you know, how do you -- how
19 do you convince folks of that. It's something
20 that's fairly intuitive, I think, but you know,
21 can you put a slam dunk on it by -- you know,
22 by looking at some existing processes and...

23 **MR. GRIFFON:** Well, yeah, and I guess that --
24 you know, back to my point on that, I think
25 your -- your evaluation report will go along

1 way to helping us to clarify this, though. But
2 I mean back to -- to my other point on this
3 whole thing, which is -- sort of falls in with
4 Joyce's evaluation of 68 versus 30, I mean if -
5 - if you had -- if NIOSH had independently
6 evaluated these intakes, then you would have
7 used 68 if you went back to the -- you know,
8 the raw data and said okay, here's the --
9 here's the incidents, let's re-evaluate the
10 data itself, instead of taking just the intake
11 from those cases.

12 **DR. NETON:** Yeah.

13 **MR. GRIFFON:** So you know, and -- and this
14 issue would go away completely. But anyway, I
15 think we'll wait for your evaluation report I
16 think --

17 **DR. NETON:** Yeah.

18 **MR. GRIFFON:** -- I think, at this point, yeah.

19 **DR. LIPSZTEIN:** One of the thing -- I don't
20 know how valid this is, but I was just thinking
21 if I was someone that was applying for
22 compensation, so for example if you look at the
23 -- for example, for plutonium 241, there was
24 that very high intake in '62, and then there
25 was a high intake in '77 also, and then if I

1 worked in the '60s period, I would -- I would
2 rather use the -- I would actually
3 (unintelligible) I would -- why didn't they use
4 the data from the '60, why did they mix with
5 data from the '70s and -- and I get a lower
6 intake on the calculation of my dose when I was
7 not there in the '70s, for example.

8 (Unintelligible) you know, I know
9 (unintelligible) you have to -- you have to
10 find a (unintelligible) criteria to use, but
11 the criteria is objective and if you think on
12 the side of the client, he might, you know, go
13 with (unintelligible) and say look, I -- you
14 know, this -- this was the -- where the largest
15 intakes et cetera (unintelligible) they were
16 from a time I was not working there. And
17 that's why the -- the -- the mean of the five
18 is lower than the highest intakes from the
19 period I was working there.

20 **MR. ALLEN:** But the idea that it was -- we had
21 some, I don't know, 6,000 intakes estimated by
22 Savannah River and they were done using ICRP-30
23 methodology is why we had all the
24 consternations in there, but they were
25 throughout time, so we picked the highest five

1 for each isotope that there was an intake
2 calculated for. If we were to refine that to a
3 -- say a decade, then by definition there's
4 going to be some -- some in there that are much
5 lower in that decade, so the average should
6 drop. So I mean it's just a question of -- you
7 know, is high five throughout -- high five
8 throughout time is going to be higher than the
9 high five for any given decade, generally.

10 **DR. LIPSZTEIN:** Depends on the decade
11 (unintelligible) --

12 **DR. NETON:** It does, but --

13 **DR. LIPSZTEIN:** -- and I know you have to have
14 a criteria, I don't argue with that. I'm just
15 saying that if I was someone claiming for
16 something, I wouldn't -- you know, and I
17 understood what was on those tables, I wouldn't
18 let it go like that.

19 **MR. GRIFFON:** I think -- I think at this point
20 we'll wait -- you know, Jim's offered an
21 evaluation report. I think we need -- you
22 know.

23 **DR. LIPSZTEIN:** (Unintelligible)

24 **MR. GRIFFON:** Short evaluation report will help
25 us, and then we can go from there. Right, Jim?

1 Is that --

2 **DR. LIPSZTEIN:** Okay.

3 **DR. NETON:** Yeah.

4 **MR. GRIFFON:** All right. Number 11?

5 **DR. LIPSZTEIN:** Number 11 -- I think Jim
6 explained that at that time IMBA didn't have
7 the -- all the numbers. Right?

8 **MR. GRIFFON:** Oh, right.

9 **DR. LIPSZTEIN:** And they had to use surrogates,
10 and now this can be (unintelligible), is that -
11 - did I understand right?

12 **MR. ALLEN:** Yeah, that was discussed earlier, I
13 remember, anyway.

14 **MR. GRIFFON:** So this is the one revised as
15 needed, sort of.

16 **DR. NETON:** Right.

17 **MR. GRIFFON:** Yeah, and it's -- so you didn't
18 have the -- the most current version of IMBA,
19 obviously.

20 **DR. NETON:** Right.

21 **MR. GRIFFON:** Right. Okay. Number 12? Oh,
22 we've gone through the IMBA. A new topic,
23 anyway.

24 **MS. MUNN:** Oh, goody-goody.

25 **MR. ALLEN:** Well, if nobody else will speak up

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MR. GRIFFON: Yeah, go ahead.

MS. MUNN: Please do.

MR. ALLEN: This one our issue -- if I'm not mistaken, the comment was essentially if we assumed tritium was organically-bound tritium, the doses would be higher, and we agree. What we -- the problem is we cannot find any reason to believe at Savannah River that organically-bound tritium would be a significant -- significant hazard compared to other forms of tritium.

MS. MUNN: That's good news.

DR. MAURO: John Mauro. We've been discussing this amongst ourselves also, and we feel that, given the -- that organically-bound tritium I believe may have up to a four-fold higher dose conversion factor -- I'm not quite sure, in that range -- and that the percent of exposure, though, to organically-bound tritium at Savannah River -- at least in the case of Savannah River, is -- is very small, so bottom line is this issue is really an extremely minor issue. And --

MR. GRIFFON: So in your --

1 **DR. MAURO:** -- so Hans or Kathy --

2 **MR. GRIFFON:** -- in your opinion --

3 **DR. MAURO:** -- did I correctly characterize
4 this?

5 **DR. BEHLING:** Yeah, I think you said it. I
6 guess the assumption of a ten-day biological
7 half-life (unintelligible) in 40 days so it
8 raises the (unintelligible) time integrated
9 dose, but the percent of the organified tritium
10 is so small as to make a difference as maybe
11 one or two percent or something like that,
12 which really is an insignificant -- has an
13 insignificant impact on total dose.

14 **MR. GRIFFON:** So in your opinion, any -- any
15 modification necessary to the TIB or no?

16 **DR. BEHLING:** No.

17 **MR. GRIFFON:** And did this finding cover metal
18 tritides? I thought it also covered -- I guess
19 just OBT, huh?

20 **DR. MAURO:** That's a separate one, yeah.

21 **MS. MUNN:** Just organics.

22 **MR. GRIFFON:** Metal tritides is separate? I
23 don't see it.

24 **DR. MAURO:** I think they have it later
25 (unintelligible).

1 **MR. HINNEFELD:** Metal -- metal tritides is --

2 **MS. MUNN:** Uh-huh.

3 **MR. GRIFFON:** Oh, okay.

4 **DR. MAURO:** We'll see, but I guess the only
5 point being made here is that there's reason to
6 believe that there's a large fraction of the
7 tritium exposure was to organically-bound
8 tritium. Well, yeah, then we have a three or
9 four-fold (unintelligible), but if it's not, as
10 is the case at Savannah River, I can't see
11 really worrying too much about this.

12 **MR. GIBSON:** This is Mike Gibson. So you're
13 speaking right now specifically at Savannah
14 River and organically-bound tritium and, just
15 as Mark said, not necessarily other forms of
16 stable tritides?

17 **DR. MAURO:** Yeah -- yeah, there were these --
18 another issue of I guess metal tritides that
19 was -- I think that's here or -- I'm not sure
20 if that's discussed with a specific -- other
21 procedures, I'm not sure, but -- other separate
22 issue, and I'm not quite sure where we came
23 down on that one.

24 **DR. BEHLING:** I think it's part of the revised
25 TIB-11, I think. Don't they discuss metal

1 tritides in TIB-11?

2 **MR. GRIFFON:** I guess that's what I was asking.
3 It's coming up next, so we'll (unintelligible)
4 in a second here. But yeah, OB-- so OBT for
5 the -- for Savannah River Site for this TIB-1,
6 you don't think that the TIB has to be modified
7 in any way? I mean is -- is clarification
8 needed that if it's likely that -- if -- if
9 data suggests that a person was, you know,
10 exposed to organically-bound tritium in any
11 significant way, then -- then consideration
12 should be given for a different -- I guess
13 that's obvious, you know. I think that a dose
14 reconstructor would do that if -- if data was
15 there to present itself and -- so I guess no --
16 no change is needed. Is that what --

17 **MS. MUNN:** Yeah.

18 **MR. GRIFFON:** -- I'm hearing?

19 **DR. BEHLING:** Perhaps a statement should be
20 made that the issue of organified tritium has
21 been looked into and there's no supportive data
22 to suggest that it's there in significant
23 quantities, which would then minimize the
24 potential concern.

25 **MR. ALLEN:** You're talking about that statement

1 in the TIB --

2 **DR. BEHLING:** Yeah.

3 **MR. ALLEN:** -- or in the review of your --

4 **DR. BEHLING:** In the TIB, so that you can take
5 a preemptive position in saying that this has
6 been looked into and if there is data to
7 support that statement perhaps then that would
8 put that whole issue to rest.

9 **MR. ALLEN:** I'm kind of worried about it
10 confusing people more than clearing things up
11 if it's in the TIB.

12 **DR. BEHLING:** Well --

13 **MR. ALLEN:** It'd be great in the review, you
14 know, or some documentation here.

15 **MR. GIBSON:** I couldn't hear that. What was
16 that again? Who was talking?

17 **MR. ALLEN:** I'm sorry, this is Dave Allen. I
18 was -- me and Hans were just talking across the
19 table here and he's suggesting possibly a -- a
20 few sentences in the TIB saying that
21 organically-bound tritium was looked into and
22 it's not an issue at Savannah River. I'm just
23 wondering if it might not confuse the issue
24 more than clarify it if it's in the TIB, and
25 suggest maybe the -- somewhere in this review

1 might be a better place for it.

2 **MR. GRIFFON:** Yeah, and I think it's in the
3 NIOSH response right now as -- you know, what
4 you said is so far OCAS has not conceptualized
5 an exposure scenario da da da da da da. Could
6 I --

7 **DR. LIPSZTEIN:** Yeah, because -- I'm sorry --
8 because the way it's written makes people more
9 confused 'cause it only says organically-bound
10 tritium historically has been ignored for
11 occupational dose assessment, and the Savannah
12 River Site assumes that there is no significant
13 quantities of stable metal tritides.

14 **MR. GRIFFON:** Oh, that's different.

15 **DR. LIPSZTEIN:** So it just says that this
16 historically has been ignored and then nothing
17 else about organically-bound, so maybe -- would
18 say that there are no significant quantities of
19 SMT and OBT, also.

20 **MR. ELLIOTT:** Another thing to evaluate and --

21 **MR. GIBSON:** This is Mike Gibson. Could I ask
22 this question of I guess someone from NIOSH,
23 and maybe this is not the right place for it,
24 but when -- if someone gets some illness, how -
25 - you know, whether it's -- I know you guys

1 deal with subtitle B and Labor deal with E, but
2 how do we consider the combination of the
3 radiation dose and possibly the toxicity of the
4 metal that this tritium that's bound to that's
5 lodged in the lungs and -- and the
6 synchronization of -- of those two elements
7 that may have caused whatever illness the
8 people have?

9 **DR. NETON:** Well, I guess the short answer,
10 Mike --

11 **MR. GRIFFON:** I guess, you know, in answer to
12 your question, Mike, I think it's up to -- to
13 Labor to do that under subtitle E, but --

14 **DR. NETON:** Right, we're -- we're not
15 addressing at this point any -- any synergistic
16 effects between other agents and radiation,
17 mostly because we don't have the models
18 available to do anything in that area
19 (unintelligible).

20 **MR. HINNEFELD:** That'd be Labor, anyway.

21 **DR. NETON:** And Labor -- subpart E, as you --
22 as you pointed out, is -- is tasked with doing
23 that.

24 **MS. MUNN:** We are not charged to do so.

25 **MR. GIBSON:** So would it -- would be our --

1 would it -- this is Mike again. Is it under
2 our charge to ask the Department of Labor to
3 make sure that they are considering that, or
4 should we raise that issue with them or who --
5 how do we make sure this issue is addressed?

6 **MS. MUNN:** It wasn't -- this is Wanda. It
7 wasn't in our charge when we were originally
8 established, because that's the question I
9 asked of several people at the time and read
10 the documentation very carefully because I was
11 concerned about having to express some opinions
12 or develop expertise with respect to something
13 other than radiation effects. I was hesitant
14 to do that.

15 **DR. WADE:** It's not the responsibility of the
16 Board. Certainly any individual member of the
17 Board could comment to Labor, as they might
18 wish --

19 **MR. GRIFFON:** Right.

20 **DR. WADE:** -- on the importance of that issue.
21 But it's not the responsibility of this Board
22 as constituted to look at that issue. Again, I
23 would encourage you, if you have strong
24 feelings, to let those feelings be known on a
25 personal level.

1 **MR. GIBSON:** Okay, thank you.

2 **MR. GRIFFON:** Right, right, we don't advise
3 Department of Labor.

4 Okay, so -- but -- but I'm just going back -- I
5 guess Joyce is reading from the TIB, and that
6 to me -- I mean that -- that raises a question
7 of -- of -- in my mind, anyway, of NIOSH's
8 response here. I mean I get the opinion, if
9 I'm reading this right, from -- from your
10 response that -- that -- that NIOSH has looked
11 into this, that it's not just that historically
12 OBT has not been considered, as is stated in
13 the -- in the OTIB now. It's that NIOSH has
14 investigated this and determined that no
15 exposure scenario -- there's a difference
16 there. It's subtle, but I think it's an
17 important difference because I think if -- if
18 workers at Savannah read that and said well,
19 yeah, we know historically they haven't
20 considered OBT, that's why we're concerned
21 about it, or what -- you know, someone could
22 say that. And I think it's different for NIOSH
23 to say that we've looked at all possib-- you
24 know, not all possible, but we've looked at,
25 you know, all exposure scenarios we can think

1 of and we don't think OBT would be a -- have
2 any kind of impact on the overall dose. Is
3 that what was done here or...

4 **MR. ALLEN:** That's basically it, Mark, and we
5 agree that the sentence in the TIB is very
6 poorly worded and we -- I guess it's just a
7 debate, you know, between us what's -- whether
8 it's better to revise that or to eliminate the
9 issue altogether from the TIB.

10 **MR. ELLIOTT:** We can certainly revise the
11 sentence, but it's -- am I hearing that it's
12 our understanding that we've not identified any
13 processes or relevant exposure scenarios that
14 would lead us to believe there was a high
15 potential for organically-bound tritium?

16 **MR. ALLEN:** Right.

17 **MR. GRIFFON:** Right.

18 **MR. ELLIOTT:** And I hear SC&A must have come to
19 that same conclusion in their evaluation of
20 this piece. They don't find any process-
21 related commentary that leads us to believe
22 there's organically-bound tritium in --

23 **MS. MUNN:** Of any significance, yeah,
24 (unintelligible).

25 **MR. HINNEFELD:** Of significance.

1 **MR. ELLIOTT:** Of significance.

2 **MR. HINNEFELD:** There would be some
3 organically-bound tritium there, but we don't
4 believe it's a significant exposure source for
5 the workers --

6 **MR. GRIFFON:** Right.

7 **MR. HINNEFELD:** -- compared to the other
8 tritium -- tritium forms, and so that's our
9 opinion and I believe that's --

10 **MR. ELLIOTT:** So it goes back to how we -- how
11 we characterize what we've done here and how we
12 explain and communicate what we've done.

13 **MR. HINNEFELD:** Right.

14 **MR. ELLIOTT:** So it's -- we will take that to
15 note.

16 **MR. GRIFFON:** Okay, yes -- yeah, thanks for
17 that clarification, Joyce. I mean

18 **MR. ELLIOTT:** Open for suggestions.

19 **MR. GRIFFON:** -- so I put -- I put that NIOSH
20 will consider revising or deleting language in
21 TIB related to organically-bound tritides.
22 SC&A agrees -- I'll put that first, that SC&A
23 is in agreement with the NIOSH response, and
24 NIOSH -- additionally, NIOSH will revise or
25 delete language in TIB related to organically-

1 bound tritides. Is that okay?

2 **DR. LIPSZTEIN:** Okay.

3 **MR. GRIFFON:** Number 13.

4 **DR. LIPSZTEIN:** The uncertainty problem. I
5 agree with some of the arguments saying that
6 there's an overestimate of the dose, given the
7 high five. On the other hand, we know that the
8 IREP program, it depends a lot on the
9 uncertainty issue. If the uncertainty is
10 higher, you get a higher probability of getting
11 compensation. Now when you consider the
12 intakes from the high five, you have some
13 intakes that were taken in the early years, so
14 they had a higher -- high uncertainty linked to
15 them. So I think something has to be written
16 about the uncertainty. I might even consider
17 okay, it's an overestimate, the high five, and
18 so we don't need to consider the uncertainty.
19 But something has to be said about uncertainty
20 because we know IREP depends on -- the result
21 of IREP depends on the uncertainty.

22 **DR. NETON:** Well, IREP has a lot of uncertainty
23 other than the dosimetric uncertainty. In
24 fact, the radiation effectiveness factors are
25 all in there with a fair amount of uncertainty,

1 but I suppose -- I don't have a fundamental
2 argument against saying why uncertainty's not
3 included. I would object to including
4 uncertainty in that analysis if we do agree
5 that these are bounding values 'cause otherwise
6 why have a bounding value. Why not use our
7 best estimate of the maximum intake. I mean
8 then we -- you know, it doesn't --

9 **MR. HINNEFELD:** Our best estimate of the
10 person's intake. Remember --

11 **DR. NETON:** Yeah -- yeah, right --

12 **MR. HINNEFELD:** -- these are overestimates for
13 --

14 **DR. NETON:** Right, and that's my point.

15 **MR. HINNEFELD:** -- this person, and so that's
16 just the general approach on it.

17 (Unintelligible) overestimate or an
18 underestimate on a quantity that we put in IREP
19 we enter as a constant so IREP has to sample a
20 distribution, it samples that number every
21 time.

22 **MR. ALLEN:** I think Joyce was just saying that
23 we should --

24 **MR. HINNEFELD:** Explain it in --

25 **MR. ALLEN:** -- include that statement --

1 **MR. HINNEFELD:** -- the TIB, right.

2 **MR. ALLEN:** -- yeah, I --

3 **DR. NETON:** Yeah, I don't have a problem with
4 that.

5 **MR. HINNEFELD:** That -- that's appropriate.

6 **DR. NETON:** If we -- if we include a statement
7 saying that a constant will be used and --
8 because of, you know, way -- a rationale as to
9 why.

10 **MR. GRIFFON:** Okay. Number 14.

11 **MR. HINNEFELD:** Number 14 I thought was sort of
12 a summary comment 'cause it kind of encompasses
13 many of the other comments --

14 **MR. GRIFFON:** Okay.

15 **MR. HINNEFELD:** -- that were made, unless I
16 misinterpreted.

17 **MR. GRIFFON:** Okay. That's fine, then we've
18 covered that one. Is that a separate finding
19 even, or can it be deleted as a finding?

20 **DR. LIPSZTEIN:** Yeah, it could -- yeah, it --
21 everything that is -- is said again, yeah.
22 It's just a (unintelligible).

23 **MR. GRIFFON:** I'm asking, I'm not stating it.

24 **DR. LIPSZTEIN:** No, no, it's just -- just a
25 repetition, yeah.

1 **MR. GRIFFON:** So just drop -- I think just drop
2 the finding 'cause it's repetitive. Right.

3 **DR. LIPSZTEIN:** Yeah.

4 **MR. GRIFFON:** All right. On the next -- we're
5 on to TIB-3 --

6 **MS. MUNN:** Which is then --

7 **MR. GRIFFON:** -- and for almost all of these I
8 have see TIB-11 in new review.

9 **MS. MUNN:** And it's -- it's gone, anyhow.

10 **MR. GRIFFON:** Right, so we -- we've -- have we
11 committed -- Lew, you have a listing of these,
12 or someone is tracking this -- or John, maybe,
13 TIB-11, have we assigned that?

14 **DR. MAURO:** If it's not on the list we'll put
15 it on the list and we'll -- but I believe it
16 is. Okay -- Kathy, did you bring the list with
17 you?

18 **MS. BEHLING:** Yes, I did, and it is on the
19 list.

20 **DR. MAURO:** Okay, thank you.

21 **MR. GRIFFON:** So I don't know that we have to
22 go through these if...

23 **MS. MUNN:** I think we can dispense with three,
24 can't we?

25 **DR. BEHLING:** Yes, yes.

1 **MR. GRIFFON:** Now going to the bottom of the
2 page, TIB-4, again, we also committed to
3 reviewing TIB-4, P -- Rev. 3-P (unintelligible)
4 like that?

5 **MS. BEHLING:** Yes.

6 **MR. GRIFFON:** What was the number, for the
7 record, TIB --

8 **DR. MAURO:** TIB-4, Rev. 3-P-1.

9 **MR. GRIFFON:** P-1? Okay.

10 **DR. NETON:** P-1? PC change?

11 **MR. HINNEFELD:** PC -- probably PC-1.

12 **DR. MAURO:** (Unintelligible) were requested to
13 add that to the list, which we will.

14 **MR. GRIFFON:** So I'm not sure, again, if we
15 need to -- well, do we need to go through these
16 if -- if everyone could look down them and see
17 if there's anything we need to go through or if
18 they can wait for the revision. Most of them
19 refer to the fact that things have been changed
20 in the revised TIB.

21 **MS. MUNN:** Item six, is that still --

22 **MR. GRIFFON:** Yeah, that's what I'm looking at
23 is number six.

24 **MS. MUNN:** -- still hanging out there?

25 **MR. GRIFFON:** Stu, on item six, is there -- I

1 see disagree.

2 **MS. MUNN:** Yeah.

3 **MR. GRIFFON:** And then it refers to TIB -- to -
4 -

5 **MR. HINNEFELD:** Yeah, actually it refers you to
6 the next response, which refers to the
7 revision.

8 **DR. LIPSZTEIN:** The response for seven says
9 that --

10 **MR. GRIFFON:** A major revision. Right?

11 **MR. HINNEFELD:** Yeah.

12 **DR. LIPSZTEIN:** -- a revision.

13 **MR. HINNEFELD:** So if that -- so the first part
14 there has to go to the -- to the new -- the
15 revised -- the review of the revised version we
16 just talked about. Right? It has to wait for
17 that since the response says it's based on
18 that. And then the parenthetical number two
19 here has -- that has to do with breathing rate,
20 which has kind of been worked over pretty hard
21 on Bethlehem -- in the Bethlehem Steel context,
22 I think, so I don't know where we stand exactly
23 on that today.

24 **MR. GRIFFON:** Well, I was going to ask that --
25 okay, let's -- let's leave that one for a

1 second and we'll come back to that. Finding
2 number eight, I think this was also discussed -
3 - discussed in Bethlehem, this -- the one
4 percent --

5 **DR. LIPSZTEIN:** Yeah.

6 **MR. GRIFFON:** -- per day question, and there's
7 a disagreement. But NIOSH is developing a
8 generic position on this, aren't you?

9 **DR. NETON:** What's the specific issue?

10 **MR. HINNEFELD:** Residual contamination and how
11 quickly it --

12 **DR. BEHLING:** One percent per day.

13 **MR. HINNEFELD:** -- how -- how quickly it
14 changes. That's the residual contamination
15 model.

16 **DR. NETON:** Residual contamination model,
17 right, has been revised. We agreed to review
18 this at other sites where it may be applicable,
19 that's correct.

20 **MR. GRIFFON:** And you're -- are you going to
21 try to establish some kind of generic --

22 **DR. NETON:** Yeah, that's a -- that would be
23 more of a generic approach -- well --

24 **MR. GRIFFON:** At least generic guidance.
25 Right? Yeah.

1 **DR. NETON:** Is there not a TIB that already has
2 generic guidance?

3 **MR. GRIFFON:** I don't know.

4 **DR. NETON:** I thought -- well --

5 **MR. ALLEN:** There is for ingestion. We've --

6 **DR. NETON:** -- yeah, this -- this -- in the
7 context --

8 **MR. ALLEN:** -- got several issues we're --
9 might be mixing up here.

10 **DR. NETON:** Right, but we do -- we did agree to
11 -- to -- we agreed to review the residual
12 contamination approach at all the sites, based
13 on our experience at the Bethlehem Steel
14 review. I think we did.

15 **MS. MUNN:** Yeah, I thought you did, too. So we
16 can say generic guidance will be developed?

17 **MR. GRIFFON:** Am I confusing issues? Is --
18 Dave, did you say -- I think --

19 **MR. ALLEN:** Either you are or I am, Mark, I'm
20 not sure.

21 **MR. GRIFFON:** I could be, that's for sure.

22 **MR. ALLEN:** No, I suspect I'm just forgetting
23 what all we've committed to here, I just --

24 **DR. NETON:** Well, remember, I thought -- I
25 thought --

1 **MR. ALLEN:** We keep (unintelligible) a list.

2 **DR. NETON:** -- and I'm speaking probably cold
3 here -- I am speaking cold here so it's a
4 little bit vague, but I thought -- remember at
5 Bethlehem Steel how we came up with, you know,
6 the air monitoring model that we used and --
7 and --

8 **MR. ALLEN:** That was all for ingestion.

9 **DR. NETON:** That was for ingestion.

10 **MR. ALLEN:** The -- Bethlehem Steel, the
11 residual contamination was handled on -- on its
12 own data, it was --

13 **DR. NETON:** Right.

14 **MR. ALLEN:** Actually I take it back, it ended
15 up being that dilution model.

16 **DR. NETON:** Right, so we've adopted a slightly
17 different approach. I think -- I think the
18 best we can commit to here is go back and see
19 what we committed to doing. I've forgotten,
20 honestly, where this stands.

21 **MR. GRIFFON:** Okay, we'll -- we'll -- yeah,
22 we'll agree --

23 **DR. NETON:** I don't want to -- I don't want
24 to...

25 **MR. GRIFFON:** Right, this is not -- we won't

1 commit at this point on that action, but I
2 think there was some -- some agreement on some
3 sort of generic...

4 **DR. NETON:** I know with Bethlehem Steel there
5 were two other bigger issues, which were oro-
6 nasal breathing we committed to evaluating --

7 **MR. GRIFFON:** Right.

8 **DR. NETON:** -- and also the extent of ingestion
9 at DOE facilities. And those are the two I'm
10 very certain of. The third piece I'm a little
11 fuzzy on.

12 **MR. GRIFFON:** And those two come down in items
13 ten and 11, I think.

14 **DR. NETON:** Right, and if that -- if those are
15 addressed there, we are going to -- that is
16 true that we are working on generic guidance
17 there. It would be its own separate TIB.

18 **MR. GRIFFON:** Okay, so -- so eight we'll leave
19 -- we'll leave as a question mark, you know,
20 let's look back at Bethlehem Steel, but
21 possibly generic guidance. Nine I think is --
22 is the new revision -- it's being addressed in
23 the new revision and we'll cover it there. Ten
24 is, again, this breathing rate which was
25 referenced a little earlier on I think also in

1 -- in finding six and the light worker model.

2 **MS. MUNN:** Yeah, we worked that one pretty
3 hard.

4 **MR. GRIFFON:** Yeah, but the -- did we commit to
5 -- is this part of that generic guidance?

6 **MS. MUNN:** My memory is that it was agreed that
7 a generic guidance would be forthcoming with
8 respect to the oro-nasal breathing thing, the
9 light worker, et cetera. That was my memory.
10 I thought we had that one closed and on a
11 working list somewhere.

12 **MR. GRIFFON:** I -- I think so. Is that true?

13 **DR. WADE:** It's what I remember.

14 **MR. HINNEFELD:** (Unintelligible)

15 **DR. WADE:** Yep, we're saying yes.

16 **MR. GRIFFON:** Okay.

17 **MR. ALLEN:** Don't ask me, I've slept since
18 then.

19 **MS. MUNN:** Twice.

20 **MR. GRIFFON:** And then number 11, do we have a
21 similar response, or no response?

22 **MS. MUNN:** Yeah. Yeah, I think it was a
23 similar response.

24 **MR. ALLEN:** That one I remember.

25 **MS. MUNN:** Yeah, they were both --

1 **MR. GRIFFON:** Yeah, okay. One-third of the way
2 through what we intended to do. Okay, 3:30,
3 shall we move on to the second set of 18?

4 **DR. WADE:** Might as well.

5 **MR. GRIFFON:** And at least -- at least make a
6 dent in it if -- I'm not sure how far along
7 we'll get, but at least move it ahead a little.
8 Is everybody ready? I -- wait for you to the
9 document in front of you or...

10 **MS. MUNN:** On your mark, get set --

11 **MR. GRIFFON:** Get set --

12 **MS. MUNN:** -- go.

13 **MR. GRIFFON:** -- take a deep breath and go.
14 All right. First page, case 21.1, finding --
15 finding one. And -- and I should say in
16 starting this discussion, I've penciled in some
17 -- these other rankings that we've done as a
18 workgroup before, so we don't have to discuss
19 those now, but I've tried to get a handle on
20 this site/program ranking, the category --
21 technical, procedural, otherwise -- the
22 section, external or medical, internal. And
23 lastly, after we hear a NIOSH response or NIOSH
24 resolution, I guess we'll fill in that Board
25 action number that was done in the first set of

1 20.

2 So 21.1 says reviewer identified errors in
3 calculation of recorded photon doses.

4 **MR. HINNEFELD:** Yeah, it looked to me like
5 there are two different records in this
6 claimant's folder about getting their exposure
7 record. There was one that gives a skin -- or
8 a shallow and a deep number that appeared to be
9 photon only because there was also a neutron
10 column on there. And then there's a
11 handwritten summarized page that only gives a
12 deep and shallow. And if you look at the
13 numbers, the neutron -- the neutron number has
14 been added to the deep photon on the first
15 sheet in order to get the deep number on this
16 sheet. And so the years that correspond to the
17 arithmetic error were the years when there was
18 a neutron number other than zero. So it seems
19 like the starting point -- what the dose
20 reconstructor did was -- to put a starting
21 point on this calculation was to take the
22 difference between the shallow and deep photon,
23 ignoring the neutron part, and used that as the
24 starting point of the calculation. The
25 difference is so small, though, I don't know

1 that we want to spend a lot of time fighting
2 this out.

3 **MS. BEHLING:** No --

4 **MR. HINNEFELD:** I mean it's a trivial
5 difference.

6 **MS. BEHLING:** -- in fact I think what happened
7 in this case, there was an underestimation of
8 the 30 to 250 keV dose and overestimation of
9 the over 30, so they (unintelligible) out.

10 **MR. HINNEFELD:** Yeah, it kind of balanced out.
11 It really makes no difference in the outcome of
12 the case. I mean we'd have to fight through a
13 lot of details here to come to resolution on it
14 here, so I'd just as soon go on.

15 **MS. BEHLING:** Yeah. No, it's just one of the
16 things that we look at and we saw that there
17 was an error.

18 **DR. BEHLING:** Let me --

19 **MR. GRIFFON:** So --

20 **DR. BEHLING:** Mark, let me make a couple of
21 comments. I think when -- when we look at the
22 dose reconstruction audits, you can classify
23 some of the findings in several categories.
24 Some of -- some of those categories may not
25 require any resolution. And what do I mean by

1 that? If -- if we see, for instance, that
2 there was a mathematical error done by one dose
3 reconstructor, it's a finding for that
4 particular audit, but it has no implications
5 for the program and for the process of dose
6 reconstruction, and I don't think we need to
7 invest a lot of time under those conditions.
8 If, on the other hand, we find that there is
9 recurrent error committed by --

10 **MR. GRIFFON:** Right.

11 **DR. BEHLING:** -- a dose reconstructor after
12 dose reconstructor, and we find that root cause
13 is an ambiguously-phrased procedure, then I
14 think there is reason to request that changes
15 be made in order to rectify that. And so I
16 think -- let's be careful in identifying errors
17 that are one of a kind because a dose
18 reconstructor was -- probably had his mind on
19 something else, as opposed to systemic errors
20 that reflect ambiguous procedures or -- or
21 insufficient training on the part of the dose
22 reconstructor, et cetera. Those we can fix.

23 **MR. GRIFFON:** Yeah -- yeah, I agree with you,
24 Hans, or -- or the other reason for looking for
25 those patterns might be a quality control

1 effort --

2 **DR. BEHLING:** Yes.

3 **MS. BEHLING:** Exactly.

4 **MR. GRIFFON:** -- which -- which, again, in
5 these maximizing cases is, you know, probably
6 not as -- as relevant. But as we get into the
7 best estimates, certainly --

8 **DR. BEHLING:** Yes. Yes.

9 **MR. GRIFFON:** Yeah. So for this, I think --
10 you know, we have SC&A and NIO-- I'm just
11 writing this in the NIOSH resolution column,
12 SC&A and NIOSH agree with minor technical
13 errors; however it would have no effect on --

14 **DR. BEHLING:** Yes. And for that reason, we
15 have that checklist that says what is the
16 implication of the findings, and we you see a
17 low finding that says yeah, technically it's
18 incorrect, but does it really impact anything
19 regarding the dose, let alone the POC. And if
20 the answer's no, then it's just a technical
21 issue that -- because we started off with the -
22 - with the -- on the premise that we have to
23 demonstrate to the members of the Board that we
24 understand the dose reconstruction process by
25 tracking each and every number through all of

1 the manipulations that went into the dose
2 reconstruction. And in the process we
3 uncovered errors that oftentimes are so minimal
4 and so subtle -- subtle that they require no
5 resolution.

6 **MR. GRIFFON:** Right. Okay.

7 **DR. LIPSZTEIN:** May I ask where are you,
8 because I'm completely lost.

9 **MS. BEHLING:** Joyce, we're onto a new matrix.
10 This is the Task IV matrix.

11 **DR. BEHLING:** You may not have it, Joyce.

12 **DR. LIPSZTEIN:** I don't have it, so -- okay, so
13 then I think -- do you need me or should I hang
14 up, because I don't have it.

15 **DR. MAURO:** Well, Joyce, you know what you
16 could do -- because I'm working from the actual
17 report, the big report, the three-ring binder.
18 It tracks very nicely to the matrix 'cause
19 that's how he built it, and so I'm able to
20 track it even though I don't actually have the
21 matrix in front of me.

22 **MS. BEHLING:** I apologize, Joyce. I didn't
23 know if you were going to participate in this
24 portion, but you certainly -- you can do -- you
25 know, do what John is suggesting here.

1 **DR. LIPSZTEIN:** Uh-huh, which -- which document
2 is it?

3 **DR. MAURO:** You know the big white book, three-
4 ring binder --

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

6 **DR. MAURO:** -- it says (unintelligible) second
7 set of cases, May 2005.

8 **DR. LIPSZTEIN:** Oh, okay.

9 **MR. GRIFFON:** Second -- second set of cases,
10 yeah.

11 **MS. MUNN:** Cases 21 through 38.

12 **DR. LIPSZTEIN:** Okay, I'll try to look for it
13 and I'll come back if I find it.

14 **MS. MUNN:** Mark --

15 **DR. LIPSZTEIN:** Okay?

16 **MR. GRIFFON:** Yeah.

17 **DR. BEHLING:** Okay.

18 **MS. BEHLING:** Okay, thanks, Joyce.

19 **DR. LIPSZTEIN:** 'Bye. Thank you.

20 **MS. MUNN:** Mark, I --

21 **MR. GRIFFON:** Yeah.

22 **MS. MUNN:** I know that we haven't done this in
23 the past, but it has occurred to me that
24 perhaps the most effective way for us to
25 address these very detailed findings on the

1 case reviews would be to change our approach
2 just a little bit and perhaps look at those --
3 only those cases that are going to have a large
4 impact or a definable impact first, and then go
5 back and see -- then go through the lower case
6 ones. Perhaps that -- that may not be
7 effective in the long run, but I'd certainly
8 like to try that at some juncture. As Hans has
9 pointed out, are findings that are not
10 repeatable things or are findings about which
11 we really cannot do anything. And if that's
12 the case, then -- then our -- our resolution
13 will need to end up being no action necessary.
14 On the other hand, if there is an appreciable
15 effect, potentially, from the error, then
16 that's something that we may have an amount of
17 discussion about.

18 **MR. GRIFFON:** I don't disagree with you, Wanda.
19 I -- I've actually tried this in the past,
20 though, and it ends up that we end up going
21 back through them one by one. I think part of
22 the problem is that we -- you know, the matrix
23 is useful, but it's also written in very
24 shorthand summary fashion. And if we skip some
25 of these I think we might -- we might miss

1 something that we should have probably went
2 through.

3 **MS. MUNN:** Oh, I wasn't suggesting that we skip
4 them. I just --

5 **MR. GRIFFON:** Oh, okay.

6 **MS. MUNN:** -- suggest that we reprioritize our
7 approach to them so that the ones that are of
8 significance we can tell, that those be the
9 ones we discuss first so that the others, which
10 may respond only -- the result -- the resulting
11 response may only be no action necessary, no
12 action necessary --

13 **MR. GRIFFON:** Yeah, okay, I -- I just think --
14 I mean my -- my impression is that if we go
15 through them one by one we might -- I think
16 those ones are going to pop out that are easy
17 to dispose of and we won't have a lengthy
18 discussion on them.

19 **MS. MUNN:** Okay, you're the guy that --

20 **MR. GRIFFON:** I hope. I hope. I mean I --
21 'cause I'm looking through -- I highlighted on
22 -- on the computer and I have little tidbits
23 highlighted sporadically here, and it's not
24 obvious --

25 **MS. MUNN:** That's fine. You don't -- you don't

1 need to --

2 **MR. GRIFFON:** It's not obvious how to --

3 **MS. MUNN:** -- placate me, just go -- go with
4 it.

5 **MR. GRIFFON:** -- prioritize, that's what I'm
6 trying to say. Okay.

7 **MS. BEHLING:** Now I agree with you, Mark,
8 because in some of these cases we might be able
9 to say let's go through the case rankings and
10 pick mediums or highs, but we will miss issues
11 that I think --

12 **MR. GRIFFON:** Right.

13 **MS. BEHLING:** -- are important to discuss along
14 the way.

15 **MS. MUNN:** Well, I think we need to discuss
16 them all.

17 **MS. BEHLING:** Yeah.

18 **MS. MUNN:** I wasn't suggesting not discussing
19 them.

20 **MR. GRIFFON:** Yeah, I'm just trying to --

21 **DR. BEHLING:** And -- and when you --

22 **MR. GRIFFON:** I'm try-- I think right now it'd
23 be better just to go through and maybe --

24 **MS. BEHLING:** Be sen--

25 **MR. GRIFFON:** -- for the next -- for the next

1 version we'll try to prioritize ahead of time.
2 That's not a bad idea, but --

3 **MS. BEHLING:** Yeah, in fact that's something I
4 want to discuss as we go through these. But I
5 -- I think we do need to go through these
6 sequentially, and we'll be sensitive to the
7 fact that there's some that we can just move
8 along.

9 **DR. BEHLING:** In fact, you'll -- you'll see an
10 awful lot of findings that are repetitious
11 because the -- in fact, the first three sets
12 were maximized -- mostly maximized, some were
13 minimized dose reconstructions, and -- and you
14 will find that there's a repetition of errors
15 that -- that you see throughout these different
16 sets. And so when we come across them you're
17 going to probably realize that well, we've
18 discussed that before so let's go on.

19 **MR. GRIFFON:** Yeah, okay. 21.2 actually -- I
20 think this is one that can be fairly quickly
21 disposed of. NIOSH agrees, but it -- again,
22 this is an overestimating approach --

23 **MS. BEHLING:** Yes, that's fine. It's
24 uncertainty, so we can move on.

25 **MR. GRIFFON:** And 21.3 --

1 **MS. BEHLING:** Same, it's an uncertainty issue
2 and it is a high -- it's unnecessarily high.

3 **MR. GRIFFON:** Right. 21.4 -- and stop me,
4 anybody, if we need a longer discussion on any
5 of these.

6 **MS. BEHLING:** Okay. I'm not sure
7 (unintelligible), can NIOSH explain this?

8 **MR. HINNEFELD:** Well, I can --

9 **MR. GRIFFON:** Yeah, this is a lengthy one.

10 **MR. HINNEFELD:** I think the -- the numbers
11 aren't worth spending a lot of time on because
12 the numbers are very small, no matter how you
13 do it. When I went through the TBD tables I
14 could reproduce essentially the 38 -- I
15 actually got 37 millirem for the total dose
16 over the (unintelligible) years because it
17 breaks at various years, and I got one year at
18 the highest -- he only had one pre-1970 X-ray
19 when the dose would have been 25, and then the
20 others -- the table calls for lower doses, but
21 it doesn't really matter. And then I thought
22 that the medical exposure was pretty much right
23 on light, maybe a slight overestimate as
24 opposed to the underestimate, but the values
25 were so small I don't think it warrants much

1 time.

2 **MS. BEHLING:** Okay. Okay, I just --

3 **MR. GRIFFON:** I mean do you need to go back to
4 this one, Kathy? That's -- you know --

5 **MS. BEHLING:** No, it just surprises me that we
6 would have identified this as a finding if it
7 was a one millirem difference. We just -- we
8 wouldn't have done that, and so --

9 **MR. GRIFFON:** Right, I don't think so, so --

10 **MS. BEHLING:** -- and so that's why I'm
11 questioning --

12 **MR. HINNEFELD:** No, it was -- your -- your
13 estimate was 25 millirem a year for the entire
14 employment period times the 1.3, and then what
15 I said was well, the 25 millirem is only the
16 pre-1970 value. The TBD gives lower values for
17 later years for X-rays, so I essentially
18 reproduced what -- what I thought the number
19 should be and didn't quite get the 38, which is
20 what the DR-ist (sic) had. I got to 37. So I
21 think that's what the -- the issue was was that
22 there's a certain cut year where the medical
23 doses are lower.

24 **MS. BEHLING:** Okay.

25 **MR. HINNEFELD:** And then there is a discussion

1 in here about the -- the lumbar spine X-ray
2 that the person got. The -- it looks like the
3 -- the DR-ist just doubled one of the views,
4 the higher exposure view. There's two views on
5 the lumbar spine X-ray and it looks like what
6 the DR-ist did was just double the higher
7 exposure view rather than to put two separate
8 lines in for the different -- for the different
9 views.

10 **MS. BEHLING:** But I think what we wrote here in
11 -- is saying that we thought there was 21 years
12 of dose that may have been missing, which would
13 have -- which would have resulted in about 700
14 millirem, or -- yeah, 700 millirem.

15 **MR. HINNEFELD:** What I'd like you to do is look
16 back at the site profile for Rocky Flats and
17 the X-ray doses that are cited for years
18 because I think -- I think what you've done --
19 if you take 21 years of X-ray dose at 25
20 millirem, when in fact, based on the site
21 profile -- the equipment changed in 1970, so
22 only the 1969 X-ray would be 25 millirem, and
23 the later X-rays would be lower doses.

24 **MS. BEHLING:** Yeah, we have down here that you
25 used OTIB-6 for this, and that only one chest

1 X-ray was assigned rather than for -- one for
2 every year of employment. I believe that's
3 what we are saying.

4 **DR. BEHLING:** You have to go back to the actual
5 audit itself to identify --

6 **DR. MAURO:** I have the report open in front of
7 me. It's very helpful to -- it's written up
8 here and Kathy, will you just -- I don't know
9 if you have the report --

10 **DR. BEHLING:** Yeah, we do, John --

11 **MS. BEHLING:** Yes, we do.

12 **DR. BEHLING:** -- and the matrix is not very
13 clear in identifying the issues.

14 **MS. BEHLING:** Right, it's too -- it's too
15 abbreviated.

16 **DR. BEHLING:** It's too abridged.

17 **MR. GRIFFON:** Well --

18 **MS. BEHLING:** But I think that our point was
19 that you only assigned chest X-ray dose for one
20 year where --

21 **DR. BEHLING:** It was 21 years.

22 **MS. BEHLING:** -- there was 21-year employment
23 and we -- I guess we came to the conclusion
24 that he probably -- or this person probably had
25 an annual chest X-ray. That's what I said, I

1 couldn't imagine we would have written
2 something up for one millirem.

3 **DR. BEHLING:** No.

4 **MR. GRIFFON:** Right, right, so there's still a
5 discrepancy here. I mean I think --

6 **MS. BEHLING:** Yes.

7 **MR. GRIFFON:** -- maybe -- I -- I think this can
8 be done off-line, though. Right? That's --

9 **MS. BEHLING:** Yes.

10 **DR. BEHLING:** Yes.

11 **MR. GRIFFON:** You can go back and look at your
12 numbers and maybe talk to Stu and --

13 **MS. BEHLING:** Okay, we'll look at that again.

14 **MR. GRIFFON:** -- try to figure this out or
15 resolve this calculation discrepancy.

16 **MS. MUNN:** Might have depended on his job
17 description. He might have only had --

18 **MR. GIBSON:** (Unintelligible) this is Mike. My
19 phone died. I had to get another one and get
20 back on line. Where are we at here?

21 **MR. GRIFFON:** We're in the second set of cases,
22 Mike, on finding number 21.5.

23 **MR. GIBSON:** Okay.

24 **MS. BEHLING:** Yeah, matrix for cases 21 through
25 38.

1 **MR. GRIFFON:** Second pa-- third page into it,
2 whatever, something like that -- 21.5 in the
3 matrix.

4 **MR. GIBSON:** Okay, great. Thanks.

5 **MR. HINNEFELD:** Kathy, the medical X-ray
6 exposures are lines 212 through 233 in the dose
7 reconstruction.

8 **MR. GRIFFON:** All right. Thanks. Yeah, we'll
9 -- let's see, so -- are we on 21.5? We can --
10 I mean you don't have to redo those
11 calculations while we're on the line. I think
12 it'd be better served to work our way through
13 the matrix and you guys can work that out.
14 Right?

15 **MS. BEHLING:** Okay, yeah, we'll look at that.

16 **MR. GRIFFON:** Okay.

17 **MS. BEHLING:** I see they're all zeroes below
18 that, so maybe that's where it's changed.

19 **MR. HINNEFELD:** They round -- less than one
20 millirem.

21 **MS. BEHLING:** Is that what the -- okay. I'll
22 look at that.

23 **MR. GRIFFON:** And if you're in agreement,
24 that's fine, we can get -- you know.

25 **MS. BEHLING:** I just -- I want to look at it

1 **MS. BEHLING:** Well, Stu right now is trying to
2 get us some information. He's trying to dig
3 out some of the pages.

4 **MR. HINNEFELD:** Our response refers to the pag-
5 - to the tables in the site profile, and
6 there's a text -- I thought I had it a while
7 ago, I don't seem to be able to get my hands on
8 it real quick.

9 **MR. GRIFFON:** I'll tell you one thing that
10 jumped out at me, just to stall so Stu has some
11 time, is the highest annual value in the table
12 is for 1989. I don't know, that struck me as
13 interesting.

14 **MS. BEHLING:** Yeah, it is interesting.

15 **MS. MUNN:** There was a lot going on there in
16 '98 (sic).

17 **MR. GRIFFON:** Yeah, there was. There was.

18 **MS. MUNN:** Ask the Feds.

19 **MS. BEHLING:** I guess to keep things moving
20 along, we could also do this off-line when Stu
21 --

22 **MR. GRIFFON:** Yeah, okay.

23 **MR. HINNEFELD:** I apologize, I thought I had
24 copied some pages.

25 **MS. BEHLING:** That's okay.

1 **MR. GRIFFON:** That's okay.

2 **MS. BEHLING:** Usually when on-site ambient is
3 not significant doses here, but --

4 **MR. GRIFFON:** Right.

5 **MS. BEHLING:** -- this guidance was very
6 confusing. We'll deal with that one separate.

7 **MR. GRIFFON:** Okay, let's move to 21.6 then.

8 **MS. BEHLING:** Okay, now here's where I want to
9 pause for just a second because I believe that
10 this -- this finding is one that we've talked
11 about over and over again, and everybody's very
12 well aware of this excessive claimant-favorable
13 approach to things. And I think that there is
14 -- based on the response from NIOSH on this --
15 no, no, right here. NIOSH's response is they
16 agree, however it's a high dose and this is a
17 case that's less than 50 percent. Here is
18 where -- where I might pause to say I think
19 that there's a difference in philosophy between
20 what NIOSH is doing and what SC&A would maybe
21 recommend that is being done with these, quote,
22 claimant-favorable cases. And I think it's
23 best to explain it in terms of our -- and I
24 think the regulations state claimant
25 favorability is in cases of unknowns. And so

1 if you don't know if the person was monitored
2 and if you have to go back and calculate missed
3 dose and you don't know whether he was --
4 received internal doses, you do want to
5 calculate a hypothetical internal. However,
6 you do know what the cancer is, and there's --
7 you haven't lost any efficiency by pulling the
8 correct cancer model from your hypothetical
9 internal dose and using 12 radionuclides as
10 opposed to 28 radionuclides when
11 (unintelligible) doesn't have a reactor,
12 doesn't have all your fission products. So I
13 don't know that I agree with NIOSH's response
14 that we can just -- it's okay because this was
15 less than 50 percent and it was excessively
16 high. I feel, and you hear it in the public
17 comment area, that --

18 **MS. MUNN:** If it's wrong, it's wrong.

19 **MS. BEHLING:** Yeah, and it's not necessarily
20 scientifically sound to do this. So I believe
21 this is an approach that has been adopted by
22 NIOSH and it's a way of thinking today, and I'm
23 not sure that we want the dose reconstructors
24 to continue to think in this way.

25 **MR. HINNEFELD:** It was -- it was a way of

1 thinking up until a few months ago.

2 **MS. BEHLING:** Okay.

3 **DR. BEHLING:** I mean I think it would be very,
4 very difficult to defend when a person says
5 they modeled it, even though it was claimant
6 favorable, for a cancer that -- I didn't have
7 colon cancer and it -- and it lets somebody
8 who's on the sidelines say well, boy, they're
9 not even looking to see which cancer this guy
10 had.

11 **MR. HINNEFELD:** I think -- well, this is
12 actually the -- we selec-- (unintelligible)
13 selected 28 radionuclides rather than 12 in
14 this specific case.

15 **MS. BEHLING:** That's right.

16 **MR. HINNEFELD:** But this was an attitude up
17 until a few months ago, and -- and it's not the
18 attitude now because of the recurring issue of
19 returns coming back from the Department of
20 Labor with new information and now we're in the
21 process of explaining why the dose
22 reconstruction's so much lower. So I'd say the
23 days of sort of being -- shall we say cavalier
24 about overestimates in non-compensable cases is
25 pretty much gone now.

1 **MS. BEHLING:** It was just based on NIOSH's
2 response.

3 **MR. HINNEFELD:** I originally wrote that a few
4 months ago.

5 **MR. GRIFFON:** So -- so Stu, what -- what --
6 what concrete changes have been made? You said
7 it's -- there's a change in attitude now? Are
8 there concrete procedural changes that have
9 been made as a result of this or --

10 **MR. HINNEFELD:** I don't know that I'd say
11 they're procedural changes, but I'd say it's a
12 fact that we don't typically see just these
13 artificial inflated dose reconstructions just
14 for the sake of having a high dose. I think
15 it's -- more attention is paid to choosing the
16 right model now. Am I wrong? You guys read
17 more than I do.

18 **MS. BEHLING:** Okay --

19 **MR. ALLEN:** Generally.

20 **MR. HINNEFELD:** Okay.

21 **MS. BEHLING:** Now the other thing -- and I know
22 in this particular case I may have jumped the
23 gun a little bit because, although I -- I guess
24 I phrased this finding incorrectly, they used
25 the hypothetical -- the 12 radionuclide

1 hypothetical intake model, and I guess they did
2 probably select the right cancer here, I'm not
3 sure. But in the cases where they do select
4 the colon as the highest non-metabolic cancer,
5 I believe that that's stated in TIB-2 that
6 that's recommended. I haven't read through
7 TIB-2 in a while, but I do think that that's
8 recommended in one of the procedures. No?
9 You're shaking your head.

10 **MR. ALLEN:** Not TIB-2, maybe a procedure,
11 'cause I remember when we first did that they
12 calculated the dose for all 28 nuclides to the
13 colon, and when we first started doing some
14 claims by that and we started seeing the same
15 dose on each one, saying this is not right.

16 **MR. GRIFFON:** Right.

17 **MR. ALLEN:** Then ORAU explained that they had
18 one set of numbers calculated, that they were
19 going to fire through as much as they could
20 with that set of numbers, and we reluctantly
21 agreed to it, essentially.

22 **MS. BEHLING:** Okay. I just would like -- you
23 know, need to be sure that that's not stated
24 anywhere in the procedures for the dose
25 reconstructors to -- to use the col-- I thought

1 I read that --

2 **MR. ALLEN:** Yeah, I can't --

3 **MS. BEHLING:** -- somewhere.

4 **MR. ALLEN:** -- can't guarantee on the
5 procedure, but the TIB --

6 **DR. BEHLING:** Well, I -- I think that we -- it
7 may be in the procedure that it says --

8 **MS. BEHLING:** Yes.

9 **DR. BEHLING:** -- the colon ends up being the
10 highest non-metabolic organ, so if you have
11 prostate cancer we'll go with the colon. But
12 it just looks awfully stupid for us to use a
13 cancer -- a site that doesn't even apply to the
14 individual claim, even though it gives -- it
15 gives you a higher dose.

16 **MS. BEHLING:** And I just want to be sure the
17 dose reconstructors aren't being -- it's not
18 being suggested to them that they --

19 **MR. GRIFFON:** Right.

20 **MR. ALLEN:** I think the NIOSH response there
21 applies to the individual claim. We wouldn't
22 go back and rework that to lower the dose since
23 it was already a denial --

24 **MR. GRIFFON:** Right.

25 **MR. ALLEN:** -- but as far as the programmatic

1 issue goes, you -- we're trying to get better.

2 **DR. WADE:** We all remember the lady who stood
3 up at the last Board meeting in public comment
4 and talked about the pain of getting a letter
5 where the wrong cancer was identified. And for
6 the record, that wasn't a NIOSH letter she
7 received, but I think we all need to take care.

8 **MR. GRIFFON:** Right, right. Okay, 22.1 I think
9 we're on.

10 **DR. BEHLING:** Yeah, this is one that has
11 cropped up over and over again. I think we
12 have beaten up Stu on this one on more than one
13 occasion regarding TIB-8 and 10 that are -- and
14 here's a classic case of a procedure that
15 consistently, among every one of the dose
16 reconstructors, has been misinterpreted and --
17 and fortunately -- or unfortunately, I guess
18 fortunately for the claimant, it results in
19 doses that are usually higher than -- than what
20 the true interpretation would yield and -- and
21 I think Stu's fully aware of it. I don't know
22 if at this point TIB-8 and 10 have been revised
23 to clarify --

24 **MR. HINNEFELD:** Coming soon, yeah. We hope to
25 -- we expect to see them this month, but we

1 have not seen them yet.

2 **DR. BEHLING:** And -- and in short, if you
3 recall, Mark, the issue is one of using LOD
4 times N multiply that yet by two, then divide
5 by two and ultimately end up with a GSD, and so
6 an error one cancels error two, left with error
7 three, which is GSD, which doesn't belong when
8 you have a 95th percentile value. It's three
9 errors, two cancel out, one error's left which
10 is the GSD for a maximized dose. That's --
11 that's a consistent error that has been
12 introduced over and over again.

13 **MR. GRIFFON:** And this was over and over in the
14 first 20, yeah, we saw several times.

15 **MS. BEHLING:** Yes.

16 **MR. GRIFFON:** Yeah.

17 **DR. BEHLING:** And we're still seeing it.

18 **MS. BEHLING:** And actually what I've decided to
19 do, unless someone wants to make a
20 recommendation different from this, for this
21 fourth set of cases, because I didn't see a
22 revision to TIB-8 and 10 yet, I felt that it
23 was necessary for us to include it again as a
24 finding. And when we finally see a revision
25 that we're satisfied with, I think at that

1 point we will make something like an
2 observation and not include it on this -- this
3 matrix -- this matrix list anymore and --
4 unless it has some significant impact on the
5 case.

6 **MR. GRIFFON:** On the case, right, I agree.

7 **MS. MUNN:** But for the time being, that's
8 right, this is what we're looking for. That's
9 exactly it.

10 **DR. BEHLING:** But I think once there is a
11 resolution such as a revision to a TIB that
12 clarifies the issue, even though we may be
13 auditing a case that was done two years ago, we
14 will cease to make it a finding because the
15 resolution has already occurred.

16 **MS. MUNN:** Yeah.

17 **MS. BEHLING:** Exactly.

18 **MR. GRIFFON:** Okay, 22.2?

19 **MS. BEHLING:** Gives you a motivation to make
20 those changes in the procedure.

21 **MS. MUNN:** Yes, it does.

22 **DR. BEHLING:** We're at 22.2, Mark?

23 **MR. GRIFFON:** Yeah.

24 **MR. HINNEFELD:** This is more -- this is another
25 of the same --

1 **DR. BEHLING:** Yeah --

2 **MS. BEHLING:** Yeah, this is the same.

3 **DR. BEHLING:** -- this is a case where --

4 **MR. HINNEFELD:** -- why use 12 when it says
5 four.

6 **DR. BEHLING:** -- the records indicate the
7 person was monitored quarterly, and there's
8 firm evidence to that, and so, again, there was
9 an excessive assignment of missed dose assuming
10 a 12-cycle per year exchange and when the
11 records clearly say there's only -- he was only
12 monitored four times, we're assigning, you
13 know, three times as many -- or an excess of
14 three times more than what he should. And
15 again, I would say stick with the facts when
16 you have it. If you're not sure, give the
17 benefit of the doubt, but here we have the
18 facts.

19 **MS. MUNN:** Is this the continuing problem?

20 **MR. GRIFFON:** It's the same as the 21.6, pretty
21 much as a follow-up.

22 **MS. BEHLING:** Well -- just one second, Mark.
23 Say what?

24 **MR. GRIFFON:** I'm saying the response or the
25 resolution to that is similar to 21.6, that --

1 you know, there's agreement, but no change for
2 that case is needed, but --

3 **MS. BEHLING:** Yes.

4 **MR. GRIFFON:** -- programmatically --

5 **DR. BEHLING:** Well, that -- that may be again a
6 one-time deal. I'm not saying that every dose
7 reconstructor opts to give excess number of
8 cycles when in fact the data suggests
9 otherwise. Again, this could -- this is
10 perhaps a flaw that is linked to one dose
11 reconstructor and as a result there may not be
12 a resolution to that other than to perhaps
13 maybe issue a memo from NIOSH that says please
14 don't engage in overly-excessive assignment of
15 doses when there's no need for it --

16 **MR. GRIFFON:** Well, and I think that --

17 **DR. BEHLING:** -- or the data suggests
18 otherwise.

19 **MS. BEHLING:** Exactly.

20 **MR. GRIFFON:** I think that's the programmatic
21 response that Stu just alluded to is that
22 they're not going to -- as a policy matter,
23 they're sort of -- going to kind of shy away
24 from that --

25 **MS. BEHLING:** Yes.

1 **MR. HINNEFELD:** Yes.

2 **MR. GRIFFON:** -- both internal and external, I
3 would assume, you know.

4 **MR. HINNEFELD:** Send them a directive at least
5 -- average at least one a day, do this, honest
6 to goodness.

7 **DR. BEHLING:** Does it come return mail?

8 **MR. HINNEFELD:** (Unintelligible) no, I send
9 them e-mail so they can't -- can't come back
10 address unknown.

11 **MS. BEHLING:** This is -- goes back to that
12 philosophy issue.

13 **MS. MUNN:** Well, yeah, and I continue to be
14 very concerned that -- that the Board perhaps
15 unrealistically over-emphasized that -- the
16 claimant-favorability aspect of every decision
17 that's being made -- and that's not a smart
18 thing to do and we -- if -- if we, as -- if the
19 Board needs to take some action in this regard,
20 please tell us that it would be wise for us to
21 be more specific with respect to our claimant
22 favorable comments that started this whole
23 business.

24 **DR. WADE:** I don't -- I don't --

25 **MR. GRIFFON:** Well, I don't -- I don't think it

1 started the whole business --

2 **DR. WADE:** No, I don't think so, either.

3 **MR. GRIFFON:** -- Wanda. I'd take exception to
4 that, 'cause I think the efficiency mode
5 started this -- this business. I --

6 **MS. MUNN:** Well, yeah, but the effi--

7 **MR. GRIFFON:** -- I think you give us too credit
8 -- too much credit. I'm not sure that our com-
9 - our recommendations are carrying that much
10 weight.

11 **MS. MUNN:** But the efficiency mode more --
12 doesn't just duplicate, it more than -- more
13 than amplifies our original position about
14 being claimant-friendly. And that's where --

15 **DR. WADE:** I think this was really a pressure
16 to -- to -- to move things through the system
17 and a little bit of sloppiness developed and it
18 was tolerated because it really didn't make a
19 difference. But I think we're realizing that
20 when you live in a fishbowl like this, those
21 things can matter --

22 **MS. MUNN:** They do matter.

23 **DR. WADE:** -- so it's a matter of just getting
24 it right.

25 **MS. MUNN:** Yeah.

1 **MR. GRIFFON:** Okay, 22.3?

2 **DR. BEHLING:** Again you have to look at the
3 actual report. I think TIB-8 was used for that
4 and -- let me see here --

5 **MS. BEHLING:** TIB-8 spe--

6 **DR. BEHLING:** -- yeah, and TIB-8 clearly states
7 this is not to be used for skin doses or those
8 doses that may require a shallow dose
9 reconstruction. That includes the testes and
10 the breast and so in -- in essence the
11 procedure was incorrect for -- for deriving a
12 skin dose. They should have really used Proc.
13 6 and one of those appendices that are defined
14 under Proc. 6 for deriving skin dose. I do
15 think --

16 **MR. GRIFFON:** (Unintelligible) do you agree
17 with that?

18 **MR. HINNEFELD:** Yeah, I don't -- I don't
19 dispute that.

20 **MR. GRIFFON:** I -- I mean I think this a -- I -
21 - and -- and Hans, do you agree with the NIOSH
22 respon-- inasmuch as it doesn't affect -- that
23 -- that still the approach --

24 **DR. BEHLING:** Well, again, you know, we --

25 **MR. GRIFFON:** -- sufficiently maximized the

1 dose for this case?

2 **DR. BEHLING:** Yeah, we have been dealing
3 principally with maximized doses for the first
4 three sets, and even in the fourth set. So I
5 suppose in the end if the ultimate excuse is
6 that well, is this a maximized and it's non-
7 compensable, so all these errors really don't
8 mean anything, there's -- there's an element of
9 truth in that. Clearly we're not going to turn
10 anything over on the basis of these things, but
11 it's a matter of technical accuracy and, again,
12 the issue of the optics. Which procedure did
13 you use that you should have used but failed to
14 use in arriving at these doses, whether or not
15 they contribute to a significant difference
16 that would affect the compensability of the
17 claim. Well, that's really a second level of
18 concern and -- and we would -- and during our
19 audit we were not looking at that other than to
20 identify the findings under the checklist as
21 having a low. And as you will see in just
22 about every one of these the checklist
23 identifies this error as a low impact. So
24 nevertheless, it's a technical issue that we
25 want to bring to everyone's attention. We're

1 not saying it's going to change anything.

2 **MR. GRIFFON:** Oh, yeah, no, I'm not -- I'm not
3 taking away the finding. I'm just saying for
4 this particular case the dose would have not
5 been a lot different or a lot greater or would
6 it have been or did you assess that?

7 **DR. BEHLING:** Well, the skin dose I guess under
8 Proc. 6 would have been higher.

9 **MR. GRIFFON:** High-- high-- higher enough to
10 make a significant difference or -- in your
11 opinion, or --

12 **DR. BEHLING:** Well, again, that's subjective
13 when you say significant. Significant, would
14 it have changed the compensability? No. Would
15 it be a significant fractional increase in
16 dose? Probably. But again, it's in context
17 with all the other doses that are assigned
18 under maximized, chances are it's not all that
19 much of a dose.

20 **MS. BEHLING:** It's not that significant.

21 **DR. BEHLING:** In fact, on that issue -- and I
22 talked to Dave Allen -- there's a concern on my
23 part that people still haven't recognized that
24 when you deal with a skin dose and especially a
25 skin cancer, forget about the HP-10 dose. Look

1 at the shallow dose. That's your dose of
2 reference, and don't worry about whether it's
3 beta -- 200 -- greater than 250 or 30 to 250,
4 none of these matter. It's your skin dose, and
5 that should be the dose that should be entered
6 as your dose for determining whether or not the
7 -- the cancer is -- is compensable, and -- and
8 too many of the people are still not looking at
9 the footnote that is in Appendix B of
10 Implementation Guide 1 that clearly says if
11 you're talking about a skin cancer, forget
12 about the HP-10 dose because if the HP-10 dose
13 is cited, also -- there is also the likelihood
14 that the shallow dose is also cited, and use
15 that and forget everything else.

16 **MR. GRIFFON:** Right.

17 **MS. MUNN:** Can we put the footnote in bold?
18 Move it up from footnote status, put it
19 somewhere else?

20 **MR. GRIFFON:** Okay, 22-- Hans, just to let you
21 know, part of the reason I asked you those
22 questions was I -- I think I'd define this more
23 as a procedural -- I'm categorizing here, too,
24 in my little ma-- in the matrix, and I think I
25 see that more as a procedural finding in this

1 case.

2 **DR. BEHLING:** Yeah, it is.

3 **MR. GRIFFON:** And so that's why I'm -- I'm
4 going down this -- aiming these questions for
5 you. I totally agree with your assessment, but
6 I -- anyway, 22.4?

7 **MS. BEHLING:** Here again they just used --
8 NIOSH used I guess 40 millirem for LOD and
9 we're not sure -- it was not referenced, and
10 actually I believe that Attachment F of Proc. 6
11 was not even issued at this time, which would
12 have recommended 50 millirem, so it's -- it's a
13 minor difference, but we didn't know where they
14 came up with that LOD value.

15 **DR. BEHLING:** It's a generic value that's
16 commonly used in the early years during film
17 dosimetry, but I think under Proc. 6 or 17 I
18 think for the beta component 50 is a common
19 used value for LOD for shallow or beta
20 component. So again it's a marginal
21 difference.

22 **MR. GRIFFON:** Okay, but -- and -- and this --
23 when it says see response for finding 22.3-D.1,
24 that should have been D.1.2? Is that correct?
25 I don't see any D.1.1.

1 **DR. BEHLING:** No, I don't either.

2 **MS. BEHLING:** Actually I -- I marked that --
3 I'm not sure if I incorrectly identified those
4 finding numbers in the matrix, because in our
5 report finding 22.3 is D.1.1 and 22.4 is D.2.1.

6 **MR. GRIFFON:** Okay, so we -- I can work with
7 you, Kathy --

8 **MS. BEHLING:** Yes.

9 **MR. GRIFFON:** -- on these edit --

10 **MS. BEHLING:** Yes.

11 **MR. GRIFFON:** -- things, but we should just
12 make that consistent.

13 **MS. BEHLING:** Yes, I'm sorry.

14 **MR. GRIFFON:** All right.

15 **MS. MUNN:** That -- that same nomenclature
16 appears in the preceding finding.

17 **MR. GRIFFON:** Right.

18 **MS. BEHLING:** Yeah, I --

19 **MR. GRIFFON:** Right. 22.5?

20 **MS. BEHLING:** Okay, this (unintelligible)
21 internal.

22 **DR. BEHLING:** We've probably gone through this
23 one again already, the selection of the cancer
24 that yields a dose higher than necessary.

25 **MS. BEHLING:** Uh-huh.

1 **MR. GRIFFON:** In this case you have case
2 ranking unresolved, though. Why is that?
3 That's different than your other ones, Hans.
4 **DR. BEHLING:** Let's see here, where are we?
5 (Unintelligible)
6 **MS. BEHLING:** I don't know.
7 **MS. MUNN:** You gave it a UR.
8 **MS. BEHLING:** Oh, unresolved?
9 **DR. BEHLING:** (Unintelligible)
10 **MR. GRIFFON:** That stuck out to me as something
11 --
12 **MS. BEHLING:** Yes, (unintelligible) --
13 **MR. GRIFFON:** -- was going on --
14 **MS. BEHLING:** -- was that.
15 **MR. GRIFFON:** -- differently there.
16 **MS. BEHLING:** I don't know why we did that.
17 That's not correct.
18 **MR. GRIFFON:** We can check that out, but -- but
19 otherwise the response is similar to the
20 previous one. Right?
21 **MS. BEHLING:** Yes. Uh-huh, yes.
22 **MR. GRIFFON:** All right. And the same -- is
23 the same true with 22.6?
24 **MS. BEHLING:** Yes. There again -- let me look
25 -- there again they selected colon as the

1 cancer as opposed to the actual cancer, which
2 is -- breast?

3 **DR. BEHLING:** (Unintelligible)

4 **MS. BEHLING:** Yeah, as opposed to the breast,
5 and here again if you would have used the
6 breast for running the hypothetical internal,
7 your dose would have been significantly lower.

8 **MR. GRIFFON:** Is that -- that finding -- if you
9 look up above, 21.6 versus -- versus what you
10 have here, 22.6 --

11 **MS. BEHLING:** Uh-huh.

12 **MR. GRIFFON:** -- they're -- they're written
13 differently. Are they the same fin-- type of
14 finding?

15 **MS. BEHLING:** Yes. When we were on 21.6 --

16 **MR. GRIFFON:** 'Cause cancer type for modeling -
17 -

18 **DR. BEHLING:** It -- no (unintelligible) --

19 **MS. BEHLING:** No, it --

20 **MR. GRIFFON:** -- says something differently to
21 me --

22 **DR. BEHLING:** Yes, it --

23 **MR. GRIFFON:** -- in summary form than -- that -
24 -

25 **MS. BEHLING:** Yes.

1 **DR. BEHLING:** Mark, it should have said
2 reviewer disagrees with NIOSH's selection of
3 the hypothetical dose model for modeling the
4 hypothetical intake. In other words, the
5 difference between the 12 and 28.

6 **MS. BEHLING:** You need to make that change to
7 the matrix.

8 **MR. GRIFFON:** Okay, I wi-- yeah.

9 **MS. BEHLING:** Okay.

10 **MR. GRIFFON:** I'm just trying to get my notes
11 up -- up to speed here. Okay, what time is it?
12 4:10, we've got a little while more. 22.7.

13 **MS. BEHLING:** Okay.

14 **MS. MUNN:** We're all in the same boat.

15 **MS. BEHLING:** We were talking about this
16 earlier, and this speaks to the CATI -- there's
17 an unresolved discrepancy between the CATI
18 report and DOE records. Apparently in this
19 case I believe the claimant indicated that they
20 participated in the bioassay monitoring
21 program, but the records didn't show that and
22 so we identified this as a discrepancy.

23 **DR. BEHLING:** Unresolved.

24 **MS. BEHLING:** Unresolved.

25 **MR. GRIFFON:** And -- and NIOSH's response refer

1 to bullets one, two and three, and I don't have
2 the full report opened.

3 **MR. HINNEFELD:** Bullet one was about the
4 claimant claimed that he had participated in in
5 vivo program, but we didn't get any DOE
6 records. Bullet three was the claimant stated
7 that worker had whole body counts annually
8 through '92, but we only got records for four
9 of them conducted from 1980 to '84. And then
10 the second bullet was the claimant also stated
11 that a medical X-ray was taken in all but the
12 last year of employment. However, the DOE
13 records provide no evidence of any chest X-ray
14 examinations.

15 The second bullet, we -- the dose
16 reconstruction assigns an annual X-ray anyway,
17 so despite the fact the record didn't show --
18 the DOE record didn't show any medical X-rays,
19 that -- we didn't feel like that mattered. We
20 assigned an annual X-ray. For the first and
21 third bullets, this has to do with the bioassay
22 record of the individual, and we feel that the
23 hypothetical intake is higher than this person
24 would have received. There's more information
25 available on this specific claimant in terms

1 of, you know, work and when they worked and the
2 type of job they did that would lead us to
3 believe that they truly were unexposed or
4 moderately exposed and that the hypothetical
5 intake is the appropriate one to use. And so
6 the absence of that record we didn't think was
7 -- prevented the dose reconstruction from going
8 forward.

9 **MR. GRIFFON:** I guess -- I guess the follow-up
10 from this morning would be was this adequately
11 communicated in the DR report. And -- and I
12 mean I know you're advising that now, but you
13 know, I guess that would be, you know, one
14 question I would have is if it was clearly
15 explained to the claimant that this is what we
16 did and even though you may have participated,
17 we believe this would be bounding, you know.

18 **MR. HINNEFELD:** I don't know if it was said. I
19 would be a little surprised if it was that
20 specific.

21 **MR. GRIFFON:** Probably not, another early on.
22 Right.

23 **MR. HINNEFELD:** At the time it was done, I
24 would be really surprised.

25 **MR. GRIFFON:** So at this point I don't think

1 this is any case-specific ramification, but I
2 would I guess in a -- one resolution I see from
3 the programmatic standpoint is that NIOSH, you
4 know, is modifying the DR reports and is
5 undertaking modifications on the CATI
6 procedures. Right? I don't know if they're
7 specifically addressing this comment, but...

8 **MS. BEHLING:** Stu, (unintelligible).

9 **MR. HINNEFELD:** Oh, you want me to say
10 something? All right, let me say that the CATI
11 -- the CATI procedure modification would not
12 specifically address this comment. I would
13 think the dose reconstruction modification, the
14 new model dose reconstruction would address
15 this to some fashion, would at least put in
16 front of the claimant at closeout interview
17 time this is the record we had. And whether or
18 not the interviewer will be prepared to say
19 "and it differs from what you said in the
20 CATI", I don't know if that -- I don't know how
21 far that can go. It might -- that might be
22 possible. I don't know. So certainly we -- we
23 intend to have in the dose reconstruction this
24 is the exposure record we had and with the --
25 with the expectation that the claimant would

1 say that's not right, I was monitored more than
2 that, or something like that.

3 **MR. GRIFFON:** Right.

4 **MR. HINNEFELD:** Also the CATI sometimes is a
5 little difficult to interpret in terms of the
6 information that's written on it. I mean it
7 may say in vivo annually, and the claimant may
8 not recognize that -- he -- you know, that may
9 not -- he may not have meant that to mean
10 annually for my entire employment. It may have
11 been annually for the times when I was
12 monitored, or annually for a while, things like
13 that. I personally don't remember my bioassay
14 record from Fernald. I cannot tell you what
15 years I was bioassayed monthly, what years I
16 was bioassayed quarterly and what years I was
17 in vivo'd and what years I was not in vivo'd.

18 **MS. MUNN:** Huh-uh.

19 **MR. GRIFFON:** Right, 'cause -- and it varied
20 over time --

21 **MR. HINNEFELD:** Sure.

22 **MR. GRIFFON:** -- and what jobs for people,
23 sure, sure.

24 **MS. MUNN:** Nobody can remember that.

25 **MR. GRIFFON:** Okay, so I'm -- I'm grasping for

1 a response on this, but --

2 **DR. BEHLING:** Well, from --

3 **MR. GRIFFON:** -- I think one thing is that the
4 DR report -- the boilerplate language is being
5 -- changes are being considered and are
6 underway by NIOSH to improve the communication
7 of how, you know, these discrepancies are dealt
8 with.

9 **MS. BEHLING:** Yes.

10 **MR. GRIFFON:** And I think -- I guess that's
11 about it. I don't know -- is it -- it seems to
12 be the consensus that this would not have
13 impacted this case. Again, I -- you know, most
14 of these cases that's true for, but I figure I
15 should ask.

16 **DR. BEHLING:** No, it's clear that the assigned
17 dose of 12.4 rem based on the hypothetical
18 intake and using the colon as the surrogate for
19 the breast was obviously going to be a
20 claimant-favorable assignment of dose. It's
21 just still a discrepancy here. SC&A does not
22 question that the doses that he would have --
23 that she would have received had a more
24 detailed and complete internal bioassay dataset
25 been supplied would have exceeded anything she

1 would have gotten. I think it's clear that
2 which would -- doses were assigned are bounding
3 values.

4 **MS. BEHLING:** In fact, I --

5 **MR. GRIFFON:** For this -- for this case was the
6 -- the job title information consistent with
7 someone who should not have been monitored that
8 often or -- or do you recall or -- I -- I --
9 again, I don't have the specifics in front of
10 me.

11 **MS. BEHLING:** Let's see --

12 **MR. GRIFFON:** The job title or --

13 **DR. BEHLING:** She was a machine cleaner, that's
14 what it says here.

15 **MR. GRIFFON:** Oh, okay.

16 **MS. BEHLING:** Oh, okay, yeah.

17 **DR. BEHLING:** Yeah, and I guess those people
18 were subjected to a certain amount of potential
19 contamination during the process of cleaning
20 machinery.

21 **MS. MUNN:** Well, it depends on what machinery
22 they were cleaning.

23 **MR. GRIFFON:** Yeah, it depends on the
24 machinery, but machine cleaners in certain
25 areas would have been pretty --

1 **MS. MUNN:** Yeah.

2 **MR. GRIFFON:** -- potentially exposed, yeah.

3 **MS. BEHLING:** Yeah, but I think that we go on
4 to elaborate in finding 22.8 the fact that,
5 although there is this inconsistency, we do
6 recognize that NIOSH did assign the 28
7 radionuclides and actually we state that that
8 may have been the reason that they selected to
9 use the 28 radionuclides and use the colon as
10 the surrogate organ for the breast and -- in
11 order to potentially account for any records
12 that were missing. We go on to elaborate on
13 that in the next finding.

14 **MR. GRIFFON:** And -- and -- I mean the other
15 reason I'm pausing on this one is 'cause on
16 both of these, 22.7 and 8, you have a case
17 ranking unresolved, so again I'm won-- you
18 know, is there...

19 **MS. BEHLING:** I guess at this point we -- based
20 on looking at this case a little closer, we
21 could make those low just because the
22 hypothetical internal is used for the
23 (unintelligible) --

24 **DR. BEHLING:** Well, certainly it encompass
25 anything that --

1 **MS. BEHLING:** Yes.

2 **DR. BEHLING:** -- might have been missed.

3 **MS. BEHLING:** Yes.

4 **DR. BEHLING:** If there -- if it turns out to be
5 a case of missing records.

6 **MS. BEHLING:** Yeah. The reason it was
7 categorized initially as under review is in
8 order to potentially --

9 **MR. GRIFFON:** Oh, under review, not unresolved,
10 I'm sorry.

11 **MS. BEHLING:** Yeah, under review.

12 **MR. GRIFFON:** Okay.

13 **MS. BEHLING:** Is in order to encourage NIOSH to
14 look to see if they could find any bioassay
15 data.

16 **DR. BEHLING:** I mean to -- Mark, to answer a
17 question earlier you had, you know, I'm looking
18 at -- again at the summary table up front in
19 our dose audit, and this person had a total of
20 26 millirem of assigned -- of recorded photon
21 dose, and that's usually an indication of a low
22 exposure environment, and so she may have been
23 a machine cleaner, chances are these kinds of
24 exposures are -- are almost background or
25 within the error band of a TLD or film badge.

1 So again, my gut feeling is that whatever she
2 was assigned is more than going to compensate
3 any missed exposure that involved missing
4 records.

5 **MR. GRIFFON:** Yeah, that -- that certainly
6 reinforces the determination, sure.

7 **DR. WADE:** Well, I think that the strength and
8 the importance of this finding generically is
9 that -- is the discrepancy between the CATI
10 report and the DOE records. The question is
11 was that discrepancy recognized and dealt with,
12 and I think you're saying yes in this case, but
13 it could be in another finding it wasn't.

14 **MS. BEHLING:** It wasn't.

15 **DR. BEHLING:** I think it would be helpful if --
16 just if there was a recognition in the dose
17 reconstruction report that emphatically states
18 yes, it's possible that we're missing records,
19 but look, we're giving you 12.3 rem of internal
20 exposure using a model that is more than likely
21 to overestimate anything by an order of
22 magnitude, and having stated that, you sort of
23 walk away from this missing data -- potentially
24 missing data, without feeling that you're
25 potentially hurting the claimant in -- in not

1 considering it.

2 **MR. GRIFFON:** Right, right.

3 **MS. MUNN:** As long as they understand that any
4 shortcoming that they perceive their employers
5 as having foisted upon them was taken into
6 consideration and more than adequately
7 compensated for.

8 **DR. WADE:** But what we don't know at this
9 point, Stu, I guess is whether or not the
10 revised dose reconstruction report would
11 identify the discrepancies and speak to how the
12 discrepancies were dealt with.

13 **MR. GRIFFON:** Yeah, that's what I put as the --
14 you know, ongoing action that NIOSH is
15 modifying the DR report boilerplate language,
16 you know, and we've captured that in the
17 procedures review, too, so we'll -- we're
18 certainly going to be looking at that.

19 **DR. WADE:** Certainly that would be a good
20 thing. Whether or not the investment in time
21 will be made to do that is something that we
22 have to determine.

23 **MR. GRIFFON:** Right.

24 **MS. MUNN:** Uh-huh.

25 **MR. GRIFFON:** Right. All right. Was that the

1 time clock? All right --

2 **MR. GIBSON:** (Unintelligible) phone going bad.

3 **MR. GRIFFON:** What? Yeah, I know, I'm on my
4 second phone, too, Mike. 23.1.

5 **MS. BEHLING:** Okay, in this case -- this is
6 something that we've discussed with NIOSH
7 before -- this was a prostate cancer and, let's
8 see, OCAS Implementation Guide 1 indicates that
9 the testes should be used as the surrogate
10 organ and TIB-5 states the bladder. And I
11 think TIB-5 is correct and there needs to be a
12 change made to the Implementation Guide.

13 **MR. HINNEFELD:** Yeah, we've done that.

14 **MS. BEHLING:** You've done that.

15 **MR. HINNEFELD:** Yeah.

16 **MS. BEHLING:** Okay.

17 **MR. GRIFFON:** So IG -- IG has been modified.

18 **MR. HINNEFELD:** Yeah, there's a page change
19 from like October or (unintelligible).

20 **MS. BEHLING:** Okay, great.

21 **MR. GRIFFON:** NIOSH agrees, IG has been
22 modified. Okay.

23 **MS. MUNN:** I would submit, however, that this
24 is one of those things where the technical
25 reality may not be -- is -- is not likely to be

1 the same way the patient -- the client sees it.
2 That -- that is -- the use of that surrogate
3 organ would, in the patient's mind, probably
4 more likely be testes than bladder and --

5 **MS. BEHLING:** Sure.

6 **MS. MUNN:** -- it's one of those things that
7 perhaps requires some additional explanation.

8 **DR. BEHLING:** Well, that the difference being
9 is the DCF which accommodates an attenuation
10 component --

11 **MS. MUNN:** Yeah.

12 **DR. BEHLING:** -- and of course the bladder is
13 more proximal to the prostate than for -- for
14 external radiation --

15 **MS. MUNN:** That's not what they're going to
16 think.

17 **DR. BEHLING:** I know.

18 **MR. GRIFFON:** Yeah, I...

19 **MS. BEHLING:** Okay.

20 **MR. GRIFFON:** Good point, though. All right,
21 23.2.

22 **MS. BEHLING:** Again this is an issue that we've
23 discussed many times. It's -- they did not
24 assign any uncertainty associated with the
25 recorded dose, and it's because the

1 Implementation Guide has such complex procedure
2 and equations for calculating what the
3 uncertainty should be surrounding that recorded
4 dose. Now this is one of those cases when
5 there is a best estimate used or the workbook
6 is used and they do Monte Carlo techniques,
7 this is taken into consideration. But I think
8 here again the Implementation Guide just needs
9 to be changed.

10 **DR. BEHLING:** Well, I think the -- the current
11 workbooks that have been developed make -- make
12 an attempt to introduce that calculation that's
13 identified in -- in the Implementation Guide
14 and -- and does it for you. You can't do it
15 manually. It's impossible.

16 **MR. GRIFFON:** So this was a pre-workbook phase
17 --

18 **DR. BEHLING:** Yes.

19 **MR. GRIFFON:** -- case?

20 **DR. BEHLING:** Yes.

21 **MR. GRIFFON:** Okay.

22 **DR. BEHLING:** And people have either
23 circumvented the need for uncertainty
24 calculation by doing one of two things. They
25 multiply everything by two, which gives you the

1 95th percentile value which is allowable under
2 TIB-8 and 10, or they -- and then enter it as a
3 constant, or they simply ignore it, which is
4 now missing an uncertainty value. So we cite
5 it, even though I'm very sympathetic in saying
6 if I had to do it, I wouldn't know how. And so
7 I have to say the workbook has taken care of
8 that, but that has only been recently
9 introduced.

10 **MS. BEHLING:** However --

11 **MR. GRIFFON:** Well, can I ask NIOSH that? Has
12 the -- have the workbooks taken care of this
13 issue? I mean are --

14 **MS. BEHLING:** No, and maybe I can answer that
15 with -- just quickly. I believe actually the
16 workbook takes care of it, and this is what I
17 was trying to say, when they're using -- when
18 they're doing a best estimate because that's
19 when they run Crystal Ball and --

20 **MR. GRIFFON:** Oh, right.

21 **MS. BEHLING:** -- that's when all of the
22 uncertainty, so -- so this is not resolved on
23 most cases. I feel that the Implementation
24 Guide should be changed to either put in
25 something that's a reasonable --

1 **DR. BEHLING:** Thirty percent.

2 **MS. BEHLING:** -- 30 percent, exactly, that's
3 what I was going to suggest -- uncertainty be
4 put in with these recorded doses.

5 **MR. HINNEFELD:** Well, in our view --

6 **MR. GRIFFON:** For cases that aren't best
7 estimate? Is that what --

8 **MS. BEHLING:** Yes.

9 **MR. HINNEFELD:** Yeah. In our view, a -- a
10 measured -- measured dosimeter dose is normally
11 distributed, and so the way that -- there --
12 there are a few acceptable ways of getting
13 around that, we think. One is that if you're
14 doing a -- an underestimating approach, for
15 instance, so you -- you don't include all of
16 it, for instance, you shave it down, you submit
17 it as a constant 'cause it's at least that
18 high. There is a way to get around it by -- if
19 you're -- if the target organ has a dose
20 conversion factor that is completely less than
21 one, like below -- usually about .8 or so, or
22 .9, the entire breadth of the triangular
23 distribution is below that number, you can
24 enter one as a DCF which overestimates that,
25 and then enter your -- read a dose number as a

1 constant. We've been doing that for a while.
2 We're verifying right now that that's
3 appropriate, that that is in fact more
4 favorable than a 30 percent distribution --
5 (unintelligible) normal distribution -- 30
6 percent uncertainty (unintelligible) normal
7 distribution. We are doing that verification
8 now. So so far it's looking pretty good, 30
9 percent -- 30 percent distribution normally
10 distributed times the triangular DCF so far is
11 -- is consistently less than using the measured
12 value as a constant times one for DCF and
13 reporting that value as a -- as a constant. So
14 we're in -- we're in the middle of verifying --
15 **DR. BEHLING:** And -- but if that is adopted, I
16 guess I would recommend you proceduralize that
17 option so it's clear to -- to the dose
18 reconstructor if you're going to use
19 (unintelligible) as a DCF for those organs
20 where the DCF is well below some value, then
21 that accounts for uncertainty, so skip it.
22 **MR. HINNEFELD:** It is certainly -- it is
23 certainly our position that you cannot just
24 ignore the uncertainty 'cause it's hard. You
25 know, there should be a way to do it, like --

1 like you said, 30 percent and -- on the
2 measured dose. A measured value is normally
3 distributed.

4 **MR. GRIFFON:** Okay. So can -- can I say, Stu,
5 this is -- you're -- you're doing -- you're in
6 the throes of a final evaluation for this or...

7 **MR. HINNEFELD:** Well, on this particular one,
8 the dose conversion factor isn't entirely below
9 one, I don't think, so that shorthand wouldn't
10 be appropriate for this case.

11 **DR. BEHLING:** No, for skin, for instance, it
12 wouldn't be appropriate.

13 **MR. GRIFFON:** Right.

14 **MR. HINNEFELD:** Right.

15 **MR. GRIFFON:** Right, for this case, but then
16 for the -- for the broader issue of this
17 general finding --

18 **MR. HINNEFELD:** Yeah.

19 **MR. GRIFFON:** -- you're -- are you going to
20 revise --

21 **MR. HINNEFELD:** I think we -- we promised that.
22 I mean that's been promised -- that's part of
23 our response in the first 20 DR reviews.

24 **MR. GRIFFON:** And -- and to revise what? In --
25 in the -- in the --

1 **MR. HINNEFELD:** Well, the first thing --

2 **MR. GRIFFON:** -- IG or where -- where is the
3 procedural revision going to take place?

4 **MR. HINNEFELD:** I'll have to get with ORAU and
5 find out from them where it belongs because
6 they're the ones who worked on the procedures
7 more than us.

8 **MR. GRIFFON:** And 23.3?

9 **MS. MUNN:** Before we do anything else on 23.3,
10 how about turning the page up to page six and
11 making sure that all names are removed from
12 this.

13 **MR. GRIFFON:** Yeah, I was going to -- I saw
14 that, too.

15 **MS. MUNN:** Please, mark out the name.

16 **MR. GRIFFON:** Yeah, a name got in there.

17 **DR. BEHLING:** I'm very cautious about ever
18 using --

19 **MR. HINNEFELD:** That was ours. That was ours.

20 **MS. BEHLING:** That was NIOSH's. In this
21 particular finding we --

22 **MR. GRIFFON:** We're on 22. -- we're at 23.3.

23 **MS. BEHLING:** 23.3.

24 **MR. GRIFFON:** Yes.

25 **MS. BEHLING:** Yeah, looking at the records and

1 looking at the CATI report, we came to the
2 conclusion that possibly this individual should
3 have been assigned missed neutron dose. I
4 believe the records actually had zeroes under
5 neutron dose for '61 through '90, and then
6 there were blanks from -- no, no, I guess there
7 were zeroes between '61 through '74 and then --
8 **DR. BEHLING:** After 1974 they were recorded as
9 blanks.

10 **MS. BEHLING:** -- after '74 there were blanks,
11 and so -- and also based on the fact that in
12 the CATI report the individual indicated that
13 he may have been exposed to californium and
14 uranium, and so based on that information we
15 just felt that possibly missed neutron dose
16 should have been assessed.

17 **MS. MUNN:** He said he may have been, did not --
18 was not clear?

19 **MS. BEHLING:** What happens on the CATI report,
20 there's a list of radionuclides and --

21 **MS. MUNN:** Yeah, I remember that.

22 **MS. BEHLING:** -- they're asked to checkmark
23 those that they have been exposed to or they
24 (unintelligible) --

25 **MS. MUNN:** But there wasn't any verbal

1 expansion on that?

2 **MS. BEHLING:** No, it's just check marked.

3 **MS. MUNN:** Okay.

4 **DR. BEHLING:** But also his work station loc--
5 location was building 92-12 and I think if I
6 looked at the TBD that might suggest potential
7 exposures to neutrons.

8 **MS. BEHLING:** Stu's digging for papers again.

9 **MR. HINNEFELD:** Yeah, I'm digging -- I thought
10 I'd brought something -- I'm digging. I
11 thought I brought something on this, but maybe
12 not.

13 **MS. MUNN:** These kind of judgment calls are the
14 kind that I have the most difficulty with, and
15 I guess I've always had difficulty with
16 assigning dose to people who are monitored and
17 show zero exposure. It's one thing if you're
18 not monitored and there's reason to believe you
19 might have been exposed. But if you're
20 monitored and you're showing zero exposure,
21 then how much -- how can we just dismiss that
22 as being unacceptable, inaccurate --

23 **MS. BEHLING:** We don't write the procedures on
24 --

25 **MS. MUNN:** I know, I know.

1 **MS. BEHLING:** -- how to calculate missed dose.

2 **MR. GRIFFON:** (Unintelligible)

3 **DR. BEHLING:** Wanda, what I always do is I look
4 at the report. If I see out of a -- let's say
5 five years' worth or ten years' worth of
6 monitoring a handful of positive ones, I say
7 okay, now he was -- the exposure must have been
8 very nominal where a few of them went over the
9 point where there are recorded dose but the
10 rest are zeroes. Now that gives me reason to
11 believe that I'm not near zero, but I'm
12 somewhere between zero and recordable, and
13 that's evidenced by a few that went over the
14 top that actually became recorded dose, so I
15 usually try to look at that in saying where am
16 I. If a secretary was monitored and she has
17 ten years' worth of zeroes, you're closer to
18 zero down here, there's no question about that.
19 But if you have someone who was monitored for a
20 period of time and even a handful went above
21 that LOD level and reported as positive, then
22 you can be sure that the missing data or the
23 missed dose data is somewhere between zero and
24 LOD.

25 **MS. BEHLING:** And I think the other thing that

1 we do, and you'll see it in this particular
2 case, we try to look at supporting data such
3 as, in this case, first of all the CATI report
4 indicated the uranium and the californium. We
5 also went back and verified what buildings he
6 worked at -- in and checked the TBD to
7 determine could he have been exposed to
8 neutrons in this building, 92-12. So we look
9 at a number of issues before we make a decision
10 as to whether we believe that there -- there
11 should have been missed dose -- neutron dose
12 assigned, not just zeroes on the -- the DOE
13 records.

14 **MR. HINNEFELD:** Yeah, Y-12 hung a badge that
15 included a neutron component on everybody. I
16 mean when they badged them, the neutron
17 component went along, regardless of their
18 potential for exposure to neutrons. It's just
19 part of (unintelligible).

20 **DR. BEHLING:** Yeah, in fact that's a question I
21 have. When the TLND was introduced at Savannah
22 River or at Hanford, was a person who was not
23 even remotely likely to be exposed to neutron,
24 was that badge analyzed? Was the algorithm
25 followed to see if there was a neutron

1 component even though, based on location, the
2 likelihood of a neutron exposure was zilch?

3 **MR. HINNEFELD:** Well, I guess sitting here
4 today I don't know. I really don't
5 (unintelligible).

6 **DR. BEHLING:** Because I never know how to
7 interpret -- if I see a blank, I feel more
8 comfortable the person wasn't exposed. If I
9 see a zero, there must have been a reason why
10 that badge was processed.

11 **MS. BEHLING:** Uh-huh.

12 **MR. HINNEFELD:** So -- and I don't know, sitting
13 here. We could provide, you know, additional
14 research with the dose reconstructors and
15 people who know more about Y-12 and Y-12 dose
16 reconstructions than I do and -- and come up
17 with maybe a better explanation, but from our
18 view, that -- you know, this was someone who --
19 well, a machinist at Y-12, you know, other than
20 californium, you know, is there really going to
21 be that much neutron around the uranium --
22 chunk of uranium, you know. You're not going
23 to find it around uranium unless he happened to
24 be around the californium source, which must
25 have been a calibration source of some sort.

1 Really where's the neutron exposure, and as a
2 machinist, would he have spent that much time
3 around the californium source. So there's a
4 number of questions that play in your mind
5 about why -- was this guy really -- you know,
6 was there really significant potential for
7 neutron doses here beyond some nominal amount
8 that we feel like the overestimating approaches
9 address. But we can -- I mean we can get
10 additional information from more expert dose
11 reconstructors than I to look through this and
12 say okay, what's the thought process here and
13 why is this not a missed neutron dose in the
14 case.

15 **DR. WADE:** Well, I think we're at the witching
16 hour, so I (unintelligible) --

17 **MR. GRIFFON:** Yeah, I think we're at the -- so
18 -- so what -- just to conclude that last one,
19 though, is -- are you going to look into this
20 further --

21 **MR. HINNEFELD:** Yes.

22 **MR. GRIFFON:** -- Stu?

23 **MR. HINNEFELD:** Yes.

24 **MR. GRIFFON:** Okay. Yeah, I think it's time to
25 --

1 **MS. BEHLING:** I guess we could close out this -
2 - this number 23, though, because the last
3 finding is one that we've discussed before, so
4 we've -- this is, again, the selection of 28
5 radionuclides as opposed to 12 radionuclides,
6 and this is not necessarily a site with a
7 reactor, so we just questioned that, so just --

8 **MR. GRIFFON:** No, I see three more findings,
9 though.

10 **MS. BEHLING:** Oh --

11 **MR. GRIFFON:** 23.4, 23.5 --

12 **MS. BEHLING:** -- oh, I'm sorry, I jumped ahead.

13 **MR. GRIFFON:** Yeah, I was going to try to close
14 it out, too, but I think there's more CATI
15 discussion there and it looks like a pretty
16 lengthy one.

17 **MS. BEHLING:** Okay, never mind.

18 **MR. GRIFFON:** Or I -- yeah, let's just break
19 here at 23.3 --

20 **MR. HINNEFELD:** I think -- I think we just
21 ought to take another look at the case in
22 general. We'll take all the comments on this
23 case and make it all part of our additional
24 evaluation of -- of the components of this dose
25 reconstruction and what support do we have for

1 the approach that was taken.

2 **MR. GRIFFON:** That sounds reasonable. All
3 right, we're --

4 **DR. WADE:** Now I don't have any --

5 **MR. GRIFFON:** -- at a good break point. I'm
6 sure everybody is just about broken.

7 **DR. WADE:** -- information -- I don't have any
8 information on the -- the Boston hotels, but
9 LaShawn is working on that. That'll be our
10 operative strategy. We'll try and meet the
11 27th, close to the Logan Airport. We'll get
12 information to you as soon as we have it.

13 **MR. GRIFFON:** There is -- there is a Hilton
14 right at the airport which -- you can -- you
15 don't even have to leave the terminal, but I
16 don't know what -- you know, that's -- that's
17 one option, anyway.

18 **DR. WADE:** Right, I just don't know that
19 availability. LaShawn's working on that.

20 **MR. GRIFFON:** Okay.

21 **DR. WADE:** And then, you know, I'll leave to
22 the working group how it wants to conclude its
23 work on this set of 20 and the next 20. You
24 know, it'd be good to get this thing wrapped up
25 before the next Board meeting --

1 **MS. MUNN:** Sure would.

2 **DR. WADE:** -- that's at the end of April.

3 **MS. MUNN:** That means March.

4 **MR. GRIFFON:** Yeah.

5 **DR. WADE:** March, both the month and the
6 activity required.

7 **MS. MUNN:** Yes.

8 **MR. GRIFFON:** All right.

9 **MS. MUNN:** And any other definitions you can
10 (unintelligible) trickle on downwards.

11 **DR. WADE:** On that note, thank you for your --

12 **MR. GRIFFON:** Yeah, let -- let's think of -- of
13 -- I mean I think we might want to reconvene
14 this group --

15 **MS. MUNN:** Yeah.

16 **MR. GRIFFON:** -- and maybe piggyback with one
17 of the other site profile groups -- I'm not on
18 any other workgroup on the other site profiles,
19 so -- but -- but we can discuss that maybe in
20 Boston, if we come up to Boston --

21 **MS. MUNN:** Well --

22 **MR. GRIFFON:** -- on the --

23 **MS. MUNN:** -- it would really be very helpful
24 for me if we could do that sooner than Boston.

25 **MR. GRIFFON:** Well, do -- do you know the other

1 dates, though, for the other meetings, or do
2 you have your own --

3 **MS. MUNN:** Well, I do know that the Nevada Test
4 Site working group does not have a date
5 established. Right, Bob?

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

7 **MS. MUNN:** Because our original choice of the
8 28th couldn't be met by NIOSH staff. They
9 didn't have enough time -- not enough hours in
10 their lives --

11 **MR. GRIFFON:** Right.

12 **MS. MUNN:** -- to get there, so that group is
13 going to have to meet sometime in March, and
14 that has not been determined yet. And my
15 calendar is looking kind of funny. I don't
16 know, it just -- what does your calendar look
17 like, Mark?

18 **MR. GRIFFON:** Disastrous, but you know.

19 **MS. MUNN:** Well, can we squeeze out another day
20 in March out of this somehow to -- to get --
21 finish this one up?

22 **DR. WADE:** Could be if you pick the day, others
23 will sort of gather around you, so...

24 **MR. GRIFFON:** I think we -- I think we have to.
25 Right? We could do -- I could do March 7th or

1 8th.

2 **MS. MUNN:** I (unintelligible) 8th. As I said,
3 I'm -- I'm tied up with a caucus on the 7th
4 which will make it impossible for me to fly on
5 the 7th.

6 **MR. GRIFFON:** 7th, 8th or 9th I can do,
7 actually. How about --

8 **MR. PRESLEY:** The day of the 8th and the 9th
9 I'm tied up.

10 **MS. MUNN:** Okay. How about Friday?

11 **MR. GRIFFON:** The 10th?

12 **MR. PRESLEY:** Well, that's -- that'd -- that'd
13 be a problem for me 'cause I --

14 **MR. GRIFFON:** Getting there?

15 **MR. PRESLEY:** -- my meeting is all day on the
16 9th.

17 **MS. MUNN:** Okay. Well, we have our full Board
18 call on the 14th. Can we --

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

20 **MS. MUNN:** Can we do this the day before or
21 something, or -- well, no, that'd put us
22 traveling, wouldn't it?

23 **MR. GRIFFON:** Yeah.

24 **MS. MUNN:** Can't do that. I guess we could all
25 be in one place for the call on the 14th and --

1 **MR. GRIFFON:** Other-- otherwise I'm kind of out
2 to like March 28th or 29th or 30th.

3 **MS. MUNN:** That's awful.

4 **MR. GRIFFON:** Yeah, that's a ways away.

5 **MS. MUNN:** We need to be able to do that before
6 then.

7 **DR. WADE:** How about March 2nd?

8 **MS. MUNN:** I can't do it, but you can certainly
9 work around me. I have Oregon State's NE
10 Department in my lap on the 2nd.

11 **MR. PRESLEY:** Let me ask you something. Can we
12 have another conference call? This has worked
13 pretty good today.

14 **MS. MUNN:** Yeah.

15 **DR. WADE:** We can.

16 **MR. GRIFFON:** Ray, what do you think about
17 that? Was it okay for you?

18 **DR. WADE:** Say again?

19 **MR. GRIFFON:** I'm asking Ray if it was okay for
20 him.

21 **THE COURT REPORTER:** Yeah, the phone has been
22 good today.

23 **MR. GRIFFON:** Yeah.

24 **MS. MUNN:** As long as we can get one or two of
25 us somewhere and the -- the NIOSH folks and

1 SC&A face to face. They're the people who need
2 to be together with the paper more than
3 anything else.

4 **MR. GRIFFON:** That gives us more flexibility.

5 **DR. WADE:** How about the 3rd of March with that
6 model?

7 **MR. GRIFFON:** (Unintelligible) -- with that
8 model.

9 **DR. WADE:** Well, I mean some --

10 **MR. GRIFFON:** Yeah.

11 **DR. WADE:** -- NIOSH and some SC&A people here,
12 others by phone.

13 **MR. PRESLEY:** I can make it the 3rd up until
14 about 4:30, then I've got to back off of that,
15 but I'm available.

16 **MR. GRIFFON:** But we -- can we do that model on
17 the 2nd? Is that possible?

18 **DR. WADE:** This is Wanda's visit.

19 **MR. GRIFFON:** Oh, is that your --

20 **MS. MUNN:** Yeah, I've -- I've got Oregon State
21 --

22 **MR. GRIFFON:** The 3rd I've got --

23 **MS. MUNN:** -- (unintelligible) people.

24 **MR. GRIFFON:** The 3rd I've got a conflict in
25 the morning.

1 **MS. MUNN:** We've got -- well --

2 **MR. PRESLEY:** Y'all know (unintelligible) --

3 **MS. MUNN:** -- we're meeting on the 27th on the
4 Y-12 and SEC and -- and Rocky thing.

5 **MR. GRIFFON:** Right.

6 **MS. MUNN:** And NIOSH has said they couldn't
7 support the 28th for a different thing, but
8 could we -- would it be possible for us to
9 finish up these procedures that day?

10 **MR. HINNEFELD:** It's okay with us.

11 **MR. PRESLEY:** When's that?

12 **MS. MUNN:** Huh?

13 **MR. PRESLEY:** When is that?

14 **MS. MUNN:** The 28th.

15 **MR. GRIFFON:** 28th, be back onto the --

16 **MS. MUNN:** If we were going to meet in Boston
17 anyway.

18 **MR. PRESLEY:** I can handle that now -- oh, you
19 mean two days in Boston?

20 **MS. MUNN:** Well, or -- yeah -- yeah. Two days
21 wherever we're going to be. Since we're going
22 to be in -- in the face-to-face process anyhow
23 on a --

24 **MR. GRIFFON:** Yeah, I could do that.

25 **MS. MUNN:** -- on a different tack, and Jim has

1 said the NIOSH folks couldn't work up NTS for
2 the other working group, but --

3 **MR. HINNEFELD:** We can -- we can be -- we can
4 attend your -- on -- we can do it the 28th.

5 **MS. MUNN:** Good.

6 **MR. PRESLEY:** I -- I can make the two days in
7 Boston.

8 **MS. MUNN:** Okay, let's --

9 **DR. WADE:** I'll tentatively schedule that.

10 **MS. MUNN:** Okay.

11 **MR. GIBSON:** So that -- that's February 27th
12 and 28th?

13 **MS. MUNN:** Correct.

14 **MR. GIBSON:** Okay.

15 **MR. HINNEFELD:** We'll have to travel out on the
16 28th. We'll have to leave Boston and come home
17 on the 28th. We have to be in the office on
18 the 1st.

19 **DR. WADE:** Okay. Okay.

20 **MR. GRIFFON:** Okay.

21 **DR. WADE:** So we can start early that morning
22 'cause we'll be there already.

23 **MS. MUNN:** Uh-huh.

24 **DR. WADE:** And we'll try and leave people time
25 to get home to their -- their homes by the --

1 by close of the shift on the 28th.

2 **MS. MUNN:** Yeah.

3 **DR. WADE:** It's a plan.

4 **MS. MUNN:** Everybody but me.

5 **MR. PRESLEY:** I don't know how much I can fly
6 out of Boston that late in the afternoon,
7 either.

8 **MS. MUNN:** No, might as well hang out.

9 **MR. HINNEFELD:** Oh, shoot --

10 **DR. WADE:** What (unintelligible) --

11 **MR. HINNEFELD:** Forget -- forget it, we'll get
12 out of it.

13 **MR. GIBSON:** Mark, they have flights back to
14 Cincinnati on the 28th. Right?

15 **MS. MUNN:** Sure.

16 **MR. GRIFFON:** They should -- they should go --
17 I think -- I think at least till 9:00 or so --
18 8:00 or 9:00.

19 **MR. GIBSON:** Okay.

20 **MR. GRIFFON:** Yeah. So you should be
21 (unintelligible) --

22 **MR. GIBSON:** (Unintelligible)

23 **MR. GRIFFON:** -- yeah, you should be all right.

24 **MR. GIBSON:** I've got the kids to take care of,
25 so...

1 **MR. GRIFFON:** Yeah. Okay, that -- that should
2 work, 27th and 28th then in Bos-- hopefully in
3 Boston.

4 **MS. MUNN:** Yeah, we'll all be numb by then.

5 **MR. HINNEFELD:** You're not already?

6 **DR. WADE:** I'll let you know as soon as I know
7 about the hotel availability.

8 **MS. MUNN:** Good.

9 **MR. GRIFFON:** All right.

10 **MS. MUNN:** It ought to be someplace close.

11 **DR. WADE:** We'll figure out something.

12 **MR. GRIFFON:** Thanks a lot, everyone. Sorry I
13 couldn't be there in person.

14 **MS. MUNN:** Thank you.

15 (Whereupon, the working group meeting was
16 adjourned at 4:45 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 February 13, 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 3rd day of April, 2006.

STEVEN RAY GREEN, CCR**CERTIFIED MERIT COURT REPORTER****CERTIFICATE NUMBER: A-2102**