

This transcript of the Advisory Board on Radiation and Worker Health, Savannah River Site Work Group, has been reviewed for concerns under the Privacy Act (5 U.S.C. § 552a) and personally identifiable information has been redacted as necessary. The transcript, however, has not been reviewed and certified by the Chair of the Savannah River Site Work Group for accuracy at this time. The reader should be cautioned that this transcript is for information only and is subject to change.

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ADVISORY BOARD ON RADIATION AND
WORKER HEALTH

+ + + + +

WORK GROUP ON SAVANNAH RIVER SITE

+ + + + +

WEDNESDAY
NOVEMBER 10, 2010

+ + + + +

The Work Group convened via teleconference at 1:30 p.m., Mark Griffon, Chairman, presiding.

PRESENT:

MARK GRIFFON, Chairman
MICHAEL GIBSON, Member
JAMES LOCKEY, Member
PHILLIP SCHOFIELD, Member

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ALSO PRESENT:

TED KATZ, Designated Federal Official
DAVID ANDERSON, Law Offices of Bob Warren
ROBERT BARTON, SC&A
MEL CHEW, ORAU
HARRY CHMELYNSKI, SC&A
JENNY LIN, HHS
MICHAEL MAHATHY, ORAU
ARJUN MAKHIJANI, SC&A
JOHN MAURO, SC&A
ROBERT MORRIS, ORAU
JAMES NETON, DCAS
LAVON RUTHERFORD, DCAS
TIM TAULBEE, DCAS
BOB WARREN, Law Offices of Bob Warren

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1 P-R-O-C-E-E-D-I-N-G-S

2 (1:31 p.m.)

3 MR. KATZ: This is the Advisory
4 Board on Radiation and Worker Health, Savannah
5 River Site Work Group. This is going to be, I
6 think, a relatively brief call because we're
7 really sort of trying to get on track with
8 what's been accomplished and what work needs
9 to get to be assigned for a full Work Group
10 meeting to happen some time down the road.

11 Let's start with roll call, with
12 the Advisory Board Members.

13 CHAIRMAN GRIFFON: Mark Griffon,
14 Advisory Board Member, Chair of the Work
15 Group. No conflict.

16 MEMBER LOCKEY: Jim Lockey,
17 Advisory Board Member. No conflict.

18 MEMBER SCHOFIELD: Phil Schofield,
19 Work Group Member. No conflict.

20 MEMBER GIBSON: Mike Gibson,
21 Advisory Board Member. No conflict.

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1 MR. KATZ: I don't think I heard
2 Brad. Is Brad on the line? There's one Work
3 Group meeting I think he couldn't meet and
4 this might be it.

5 CHAIRMAN GRIFFON: I think he's
6 traveling this morning.

7 MR. KATZ: Right, okay. Well,
8 then let's go to NIOSH ORAU team.

9 DR. NETON: This is Jim Neton,
10 NIOSH. No conflict.

11 DR. TAULBEE: This is Tim Taulbee,
12 NIOSH. No conflict.

13 MR. RUTHERFORD: LaVon Rutherford,
14 NIOSH. No conflict.

15 DR. CHEW: Mel Chew, ORAU team.
16 No conflict.

17 MR. MORRIS: Robert Morris, ORAU
18 team. No conflict.

19 MR. KATZ: Okay, welcome all of
20 you. SC&A Team?

21 DR. MAKHIJANI: Arjun Makhijani,

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1 SC&A. No conflict.

2 DR. MAURO: John Mauro, SC&A. No
3 conflict.

4 MR. CHMELYNSKI: Harry Chmelynski,
5 SC&A. No conflict.

6 MR. BARTON: Bob Barton, SC&A. No
7 conflict.

8 MR. KATZ: Very good. Federal
9 officials and contractors for the feds: HHS or
10 other departments?

11 MS. LIN: This is Jenny with HHS.

12 MR. KATZ: Good. How about any
13 members of the public?

14 MR. WARREN: Bob Warren and David
15 Anderson from the Law Offices of Bob Warren in
16 Black Mountain.

17 MR. KATZ: Okay. Did you say Bob
18 Warren and David Anderson?

19 MR. WARREN: Anderson, yes.

20 MR. KATZ: David Anderson. Any
21 other members of the public?

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1 Okay, Mike, it's your agenda. Let
2 me just ask everyone on the line, please, mute
3 your phones and if you don't have a mute
4 button, use *6 because if everybody stays
5 muted, the phone will be much, much more
6 audible for everyone who is speaking and
7 listening.

8 MR. MAHATHY: Mark and Ted, this
9 is Mike Mahathy from the ORAU team.

10 MR. KATZ: Thank you, Mike.

11 MR. MAHATHY: You're welcome.

12 MR. KATZ: Glad to have you.
13 Mark?

14 CHAIRMAN GRIFFON: Thank you, Ted.

15 Yes, I realize there's a great amount of
16 interest on Savannah River SEC. There's -- I
17 was the 25th caller to join the call. I do
18 want to say, as Ted said up front, that this --
19 -- I was trying to schedule a full Work Group
20 meeting for Cincinnati, but realized that we
21 may not have -- may not be far enough along

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1 with some of the action items to make it worth
2 our while. But I did feel that it was
3 worthwhile scheduling this call at least to
4 update and make sure we're on the same page
5 with actions and to just get some hard
6 deadlines and set a meeting hopefully not too
7 long after the full Advisory Board Meeting
8 next week in Cincinnati, where we can go into
9 depth into the individual findings and
10 hopefully resolve. So my intent here is to go
11 through -- SC&A put a draft memo out.

12 Ted, was this available to the
13 public or has this not been cleared? I don't
14 know. Ted?

15 MR. KATZ: I'm sorry, Mark. I was
16 on mute. I'll have to check on that. I'm not
17 sure that it was available to the public or
18 not.

19 CHAIRMAN GRIFFON: Okay.
20 Basically, I think everything we're saying
21 here we'll keep those on the call informed,

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1 but it's basically a memo outlining all the
2 findings from the matrix we've been working
3 from and it outlines the action items, whether
4 it be NIOSH, SC&A action items to move toward
5 a path forward on resolution of some of these
6 findings.

7 So I intend, in this meeting, just
8 to go -- mainly go through the action items,
9 you know, and just because I don't want to
10 repeat the same discussions at the next Work
11 Group meeting in Cincinnati on the substance
12 of the findings. I think we're going to have
13 to go through these in depth and it would take
14 a fairly long time. But I don't think we're
15 far enough along on some of them to do that
16 today, so I want to stick to really getting
17 the status updates, updates on the actions,
18 make sure they're clear, make sure things are
19 on a path to be completed and then schedule
20 another meeting.

21 Laying it out that way, I -- maybe

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1 I can ask SC&A to just take the lead from
2 their memo and I assume Tim Taulbee will
3 probably be interjecting just to make sure
4 we're all in agreement on the actions going
5 forward. Tim Taulbee for NIOSH will be
6 interjecting, if that's okay.

7 DR. MAKHIJANI: Okay. This is
8 Arjun from SC&A. To go over the first item,
9 NIOSH had two reports on thorium, the first
10 one after 1965. We have completed an internal
11 review of that and are going over it. It's a
12 little bit delayed going to the DOE, but that
13 should happen very soon. So in a few weeks,
14 the Work Group will have that.

15 We were also to review Report 44.
16 That I believe has been done and is at the
17 DOE right now. That's the first item. John
18 Mauro had wanted me to kind of write down our
19 findings at this stage and I have reviewed our
20 thorium 1965 report. It's just some details
21 that are hanging there that it hasn't gone to

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1 the DOE yet. But these are our findings. Our
2 principal author of this review was Joyce
3 Lipsztein and I'm the main reviewer.

4 CHAIRMAN GRIFFON: Okay. Let's
5 just avoid discussion on the -- the summary of
6 the findings is there which is useful.

7 DR. MAKHIJANI: Right.

8 CHAIRMAN GRIFFON: Hold off on
9 discussing those.

10 DR. MAKHIJANI: Right, right. Of
11 course, NIOSH will get the full report.

12 CHAIRMAN GRIFFON: We'll get the
13 full report, right.

14 DR. MAKHIJANI: The one kind of
15 question I have for NIOSH is, in the 1964 time
16 frame and then in the 773A Building before
17 that, if I remember right, there was thorium
18 handling and process. There are bioassay data
19 from 773A. There was reprocessing of thorium
20 target rods in 1964, several tons per day,
21 four tons if I remember right. But we haven't

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1 seen any approach to dose reconstruction for
2 anything other than the 300 area in the period
3 of the '65 from NIOSH. And I'm wondering
4 whether NIOSH intends to give us something.

5 DR. TAULBEE: This is Tim Taulbee
6 with NIOSH. We will address those in a
7 response to your report. I don't want to get
8 into the details of why we did not include the
9 1964 reprocessing and it really has to do with
10 the uranium-233 was the product that was
11 extracted. All of the thorium from the
12 dissolved rods, as well as the mixed fission
13 products as a result of that irradiation were
14 directly sent to the tank farms so there was
15 really no exposure from the canyon directly
16 into the tank farms.

17 DR. MAKHIJANI: Well, there's also
18 Building 773 bioassay data with positive
19 bioassays. In your report, it says all
20 bioassays are below detectable, but we didn't
21 find that and all bioassays are from 773A, so

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1 obviously, there was thorium work going on
2 over there and there were positive bioassays
3 and we have seen nothing about that.

4 And we haven't done any analysis
5 of that. All you're going to see from us is -
6 - on those counts -- is that we haven't seen
7 anything from you. There's going to be no
8 analysis of those things from us because we
9 were just tasked with reviewing your reports
10 and of course, after reviewing them, we found
11 that quite a bit of thorium exposure, at least
12 thorium handling and processing was not
13 covered.

14 DR. TAULBEE: Like I said, when we
15 get your report and I hope identified this in
16 your report --

17 DR. MAKHIJANI: We have.

18 DR. TAULBEE: If this is missing,
19 then we will respond to it at that time.

20 DR. MAKHIJANI: It's in the
21 summary, so there will be, on this count,

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1 there will not be more than there is in the
2 summary.

3 DR. TAULBEE: Okay.

4 DR. MAKHIJANI: I don't know where
5 Mark wants to go with that.

6 CHAIRMAN GRIFFON: I'm here. I'm
7 sorry. NIOSH was calling me on the other
8 line.

9 DR. MAKHIJANI: Mark, I was just
10 having an exchange with Tim Taulbee that in
11 regard to the 300 -- and I understand that
12 they want to see our full report before
13 commenting, but in regard to the thorium
14 processing that was done in the pre-1965
15 period in 773A where there are positive
16 bioassay samples and there was in 1964 and
17 '65, we are not going to say anything and we
18 have no analysis of that. We weren't tasked
19 with that. We're only reviewing what NIOSH
20 has done. And in the course of reviewing the
21 thorium documents we found that a lot of

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1 thorium processing that happened that wasn't
2 covered in the report. So there's going to be
3 nothing more in our report than what you see
4 in the summary.

5 CHAIRMAN GRIFFON: Right.

6 DR. MAKHIJANI: These items are
7 not covered.

8 CHAIRMAN GRIFFON: I was going to
9 say, I added on the action list for that, and
10 I did miss a little of your exchange, but I at
11 least heard Tim say that NIOSH will address
12 this reprocessing question in the response to
13 SC&A's review of the supplemental ER report,
14 right?

15 DR. MAKHIJANI: Yes, and my
16 comment to that was you're not going to see
17 anything more than what you see right now.

18 In our analysis, we have done no
19 dose sort of potential evaluation, exposure
20 potential evaluation. We have made a comment
21 in the context of the Burning Ground that, you

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1 know, solvents were taken there and maybe
2 there might be exposure potential.

3 CHAIRMAN GRIFFON: I would just
4 ask that NIOSH incorporate it in their
5 response, even though it wasn't specifically
6 addressed in the SC&A report. Is that fair,
7 Tim, outline your strategy for that --

8 DR. TAULBEE: That's correct.
9 That is where we will address that particular
10 issue.

11 CHAIRMAN GRIFFON: Okay.

12 DR. TAULBEE: Thank you.

13 CHAIRMAN GRIFFON: Yes, so that's
14 an added action for Matrix Item 1.

15 DR. MAKHIJANI: And so for Matrix
16 Item 2, actually the review of that started a
17 little bit later, but a lot of the overview
18 comment is the same as certain items are not
19 covered, actually. In the latest meeting,
20 NIOSH indicated that they were going to cover
21 reprocessing operations in the Report 46, but

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1 Report 46 didn't have anything about
2 reprocessing operations. So that's sort of
3 the main thing that's missing. And then
4 there's the full '71 period missing.

5 I would just point out the sort of
6 gaps that we identified without going into the
7 substantive findings of what we did analyze.

8 CHAIRMAN GRIFFON: Yes, that's
9 fine.

10 DR. MAKHIJANI: Okay. Matrix
11 Issue 3, recycled uranium, we haven't received
12 -- I didn't look today or yesterday --

13 CHAIRMAN GRIFFON: And Arjun, I'm
14 sorry.

15 Tim, if you have any -- if at any
16 point you need any clarification on items or
17 something that you think is missing or
18 otherwise, please step in as Arjun is going
19 through these, okay?

20 DR. TAULBEE: Sure, thank you.

21 CHAIRMAN GRIFFON: All right.

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1 DR. TAULBEE: And in fact, on
2 Issue 3 is one of those. We did provide a
3 response to the Work Group on August 13th.
4 That was our documented dated July 19th, where
5 we did address the recycled uranium issue.

6 DR. MAKHIJANI: Your document
7 dated July 19 from August 13th: I'm not
8 understanding that. I'm seeing your document
9 dated July 19th.

10 DR. TAULBEE: We didn't send that
11 document to you all until August 13th.

12 DR. MAKHIJANI: Okay.

13 DR. TAULBEE: So that's why the
14 two different dates, but yes. We provided a
15 response to you all regarding recycled uranium
16 in that document.

17 DR. MAKHIJANI: I'm looking at it
18 and all you say is TBD is being updated to
19 resolve this issue and Table 4.6 will be
20 revised. But we don't have anything
21 substantive.

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1 DR. TAULBEE: Just a second here.

2 I believe if you go to Appendix A of that
3 particular report. Would somebody please mute
4 whoever -- it sounds like a pencil is being
5 sharpened.

6 DR. MAKHIJANI: I put myself on
7 mute. I'm trying to move away from -- yes.
8 Sorry about that. I'll try to be as quiet as
9 possible here.

10 DR. TAULBEE: Appendix A provides
11 the update of what will appear in the TBD.

12 DR. MAKHIJANI: Okay, I guess I
13 saw that you had said you are going to update
14 the TBD and I looked further than that, so --

15 DR. TAULBEE: All right, so it
16 seems like it might be in Appendix A. You can
17 review --

18 DR. MAKHIJANI: Well, I'm looking
19 at it, there's some numbers in Appendix A.
20 And I guess you provided the references up
21 front. We can begin a review of this if you

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1 want, Mark.

2 CHAIRMAN GRIFFON: I think that
3 should be the action. SC&A should review
4 these as they are outlined in Appendix A of
5 that report. Okay.

6 DR. MAKHIJANI: Okay, let me write
7 that down. I had a little bit of a mixup with
8 the schedule. I didn't realize my electricity
9 would be gone.

10 CHAIRMAN GRIFFON: I'm capturing
11 these too.

12 DR. MAKHIJANI: Thank you. The
13 next item is americium, curium and
14 californium. Regarding the actual data for
15 that, we haven't seen anything from NIOSH, so
16 far as I know and there was one other issue
17 about californium spontaneous fission that
18 NIOSH had said, look at ICRP 68, and on that
19 we agree with NIOSH. So there's no issue
20 outstanding on that.

21 DR. TAULBEE: This is Tim Taulbee

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1 at NIOSH. Again, for clarification here, I'm
2 not sure what our action is on that. We
3 addressed the californium-252 issue with
4 spontaneous fission in the fission fragments
5 and it looks like SC&A agrees with us on this.

6 DR. MAKHIJANI: Right.

7 DR. TAULBEE: I don't think --
8 that was the issue identified originally with
9 this particular issue --

10 DR. MAKHIJANI: No, you see there
11 are two issues. The californium-252 organ
12 dose factor, so it came up as part of our
13 review of the data, but the americium, curium
14 and californium are the same as all the
15 neptunium, polonium and so on. Is there a
16 coworker model for the unmonitored workers and
17 how are you going to address construction
18 worker versus non-construction worker issues?

19 DR. TAULBEE: It's the same for
20 all of these radionuclides.

21 DR. MAKHIJANI: It's the neptunium,

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1 polonium, recycled uranium.

2 Now we have something on recycled
3 uranium, but a product with the same issues.
4 Is there a dose reconstruction model? And
5 does that model include construction worker
6 versus non-construction worker data? There's
7 an adequacy of data issue and a CW versus NCW
8 issue.

9 DR. TAULBEE: Let me ask you this.

10 This is, again Tim Taulbee with NIOSH. When
11 it comes to the coworker models, shouldn't we
12 combine, then, this particular issue with
13 Issue 11 which is your dose reconstruction
14 approach for exotic radionuclides?

15 DR. MAKHIJANI: I don't think so.

16 I think they have always been listed as
17 separate matrix items because, early on, you
18 said you have data for these and we had begun
19 looking at some data. In most cases, the data
20 are pretty sparse, especially for construction
21 workers and the exotic -- exotic always being

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1 a separate issue.

2 I'm looking at the matrix and I
3 can read the matrix item. NIOSH proposes to
4 use measured data or coworker model estimating
5 dose with sufficient accuracy since data were
6 collected for all three trivalent
7 radionuclides rather than each separately.
8 NIOSH proposes to assign a result of
9 californium-252 as appropriate.

10 That's the context in which that
11 other issue of californium-232 arose, but the
12 main issue with these radionuclides is, do you
13 have sufficient data and is there a coworker
14 model and how are you going to apply that to
15 construction workers. It's quite separate
16 than the exotics issue.

17 DR. TAULBEE: Okay, so that we
18 don't get this confused again then, can we add
19 to the title, dose reconstruction for
20 americium, curium, californium-252 for
21 coworker models?

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1 DR. MAKHIJANI: Yes, this is just
2 a shorthand from the matrix. I mean it's very
3 clear in the matrix.

4 DR. TAULBEE: Okay. It wasn't
5 very clear to me from reading this response.

6 DR. MAKHIJANI: It's just a title
7 and the matrix itself is a condensation of
8 items from the ER and the TBD review. I mean
9 if we want to repeat the whole matrix item in
10 every title or sentence, I'm happy to do that.

11 CHAIRMAN GRIFFON: Let me ask -- I
12 just changed that title, just for
13 clarification, Arjun. That's fine. But the
14 substance of the -- let me get the action
15 correct. It's for these three nuclides, the
16 coworker model and adequacy of data question?

17 DR. MAKHIJANI: Yes, and for all
18 of these things there's a construction worker
19 versus non-construction worker question.

20 DR. TAULBEE: This, again, is Tim
21 Taulbee. Thanks for clarifying that title

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1 there, Mark, because really what I think
2 happened here is we have two issues in one.
3 Yes, they're related, but only one of them we
4 addressed and we felt that we were completed
5 with our response and apparently there's
6 another part here that we need to respond to
7 still.

8 CHAIRMAN GRIFFON: Yes.

9 DR. MAKHIJANI: Well, what it says
10 here is dose construction data for Am, Cm, and
11 Cs, and Cf-252 organ dose conversion factors.

12 CHAIRMAN GRIFFON: And that's
13 fine. We don't need to harp on -- I got the
14 action item down and we can -- and some of
15 these, you're right, they repeat or the
16 actions are similar, so we can go through
17 these fairly quickly, Arjun. Go ahead.

18 DR. MAKHIJANI: Yes, and the next
19 items are the same: coworker models for
20 neptunium fission products and cobalt-60 and
21 the same issues are involved there: adequacy

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1 of data and construction worker versus non-
2 construction worker. A8 is the same.

3 DR. TAULBEE: This is Tim Taulbee
4 with NIOSH.

5 Mark, if you'd like, I can give
6 you a little bit of update on where we're at
7 with those coworker models.

8 CHAIRMAN GRIFFON: Sure, that
9 would be good.

10 DR. TAULBEE: We are currently
11 assessing the neptunium and fission products
12 including the cobalt-60 there. We had coded
13 all of the whole body count data from Savannah
14 River and we were working on the coworker
15 model when we discovered that there was some
16 data that was in a hard copy format that had
17 not been coded.

18 To make a long story short, not
19 all the whole body count data that was in
20 NOCTS had been coded, so we're currently going
21 through a recoding effort from that standpoint

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1 and once that's done, then we can begin to
2 proceed with those coworker models.

3 CHAIRMAN GRIFFON: Okay. And in
4 the meantime you need to also be considering
5 the data-adequacy question and the
6 construction worker, non-construction worker,
7 but I won't harp on that, but can I ask Tim
8 time lines on any of these? I know you
9 offered some times before. I just want to get
10 a sense.

11 DR. TAULBEE: My sense for this
12 one, because of the recoding effort would be
13 middle to late January.

14 CHAIRMAN GRIFFON: And when you
15 say this one, it's all three: neptunium,
16 fission products, cobalt?

17 DR. TAULBEE: Right, well, the
18 fission products and cobalt-60 are really
19 combined together because of the whole body
20 count data.

21 CHAIRMAN GRIFFON: Right.

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1 DR. TAULBEE: And the neptunium,
2 yes, along those same lines.

3 CHAIRMAN GRIFFON: I do want to
4 keep all of this in mind in terms of setting
5 up our next meeting as well.

6 DR. TAULBEE: Yes, certainly. I
7 understand.

8 CHAIRMAN GRIFFON: Thank you.
9 That brings us to -- did we do eight, Arjun,
10 or is that separate?

11 DR. MAKHIJANI: Yes, eight is the
12 same unless Tim has a separate update for
13 that.

14 DR. TAULBEE: I do have a separate
15 update for that. Again, this is Tim Taulbee
16 with NIOSH. In this particular case, we've
17 done some additional investigation as to the
18 magnitude of this particular work and we got a
19 report that's in draft and that's actually in
20 comment resolution now that it's been drafted.

21 And we're now proposing to develop a coworker

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1 model for this. Even though we have limited
2 polonium bioassay, we believe that virtually
3 everybody who was exposed to this material
4 during the short campaign was monitored for it
5 and we have their particular data. And this
6 is a case of a small number of workers and
7 we've cross-compared names versus the bioassay
8 roster that we have for polonium and
9 everything seems to match.

10 So again, this is a draft report
11 that will be coming. It's currently in
12 comment resolution. I expect that we'll have
13 this done early to mid-December is when we'd
14 be able to commit that to the Board.

15 CHAIRMAN GRIFFON: Can I ask --
16 this is Mark Griffon, can I ask, Tim, if your
17 position is that you monitored everyone, is no
18 coworker model being proposed?

19 DR. TAULBEE: That's correct.
20 That's our current thoughts along this, but
21 please keep in mind this is a draft and that

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1 could change once it goes through our comment
2 resolution internal here.

3 CHAIRMAN GRIFFON: Sure, and I'm
4 sure you're aware of past efforts in this
5 regard, so I'm sure Jim Neton and others have
6 talked to you about it, but it's always the
7 concern of, are you sure that everyone
8 involved in the particular campaign was being
9 monitored, including the maintenance people
10 that might have went through, others, you
11 know.

12 DR. TAULBEE: Yes, I understand.

13 CHAIRMAN GRIFFON: Anyway, keeping
14 that in mind.

15 DR. TAULBEE: Okay. Yes, sir.

16 CHAIRMAN GRIFFON: Item nine,
17 Arjun?

18 DR. MAKHIJANI: Yes, let me take
19 item nine in two pieces. NIOSH's response to
20 our review of TIB-75. And just to recall, our
21 review of TIB-75 had two pieces in it. One

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1 was as a technical information bulletin in
2 general where the assertion that claimant data
3 are representative of the whole worker
4 population was examined and NIOSH's specific
5 examples from various sites were gone over.

6 And NIOSH has responded to that
7 piece of our analysis, but the time we were
8 asked to review this was in the specific
9 context of Savannah River because that was a
10 part of the basis in the Evaluation Report of
11 NIOSH saying that we can use this claimant
12 data for construction-worker SEC at Savannah
13 River site. So we have also examined that in
14 our review of TIB-75, but NIOSH has not
15 responded to that part.

16 And the reason that it is
17 relevant, not just for this matrix Issue 9,
18 but for all the matrix issues that we've been
19 discussing previously is that we found that
20 the general proposition that non-construction
21 worker internal exposure would bound

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1 construction worker internal exposure was not
2 correct. It has a general proposition,
3 although it does sometimes for some groups.
4 And that you have to parse construction worker
5 data by area and job type because some job
6 types have much lower exposure potential and
7 some have much higher and some areas have much
8 higher.

9 If you do the ratio of
10 construction worker to non-construction worker
11 by area and job type, they're often quite a
12 bit more than one. We have not seen any
13 response to that, in general, not just in
14 relation to tritium. Tritium, we are
15 analyzing and there is a separate action item
16 on that for us.

17 DR. TAULBEE: Again, this is Tim
18 Taulbee with NIOSH. And this is an effort
19 that has been underway and I think in my
20 September email to you, Mark, I had indicated
21 that I expected this particular early stage, a

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1 first part of response to this particular
2 issue would be released by the end of October.

3 That has not happened, obviously. But we are
4 still working on that report and I do expect
5 that that report will be available by the end
6 of the month or early December. This
7 specifically addresses the construction trades
8 workers versus non-construction trades
9 workers, issues raised by SC&A in the context
10 of tritium at this point because that's where
11 we have the most data.

12 It's going to boil down to our
13 method of evaluating whether there's a
14 difference between the two populations and
15 what I'm going to be looking for is buy-in
16 from the Advisory Board that the method that
17 we've proposed to make this evaluation is
18 adequate, is appropriate and if you all agree
19 to that. Once that occurs, if you do agree
20 with it, then we can address the other issues
21 such as uranium and plutonium for construction

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1 trades workers versus non-construction trades
2 workers. And it's really kind of -- I was
3 hoping to have this report out earlier, but
4 due to resources and priority issues, we've
5 not been able to get that report out just yet.

6 DR. MAKHIJANI: I don't know that
7 we have crossed wires here, because I
8 understood from our action items that you were
9 going to put up a larger tritium database and
10 that we all agreed, as you mentioned, Tim,
11 that we would hold off on the other
12 radionuclides until we had looked at tritium
13 and that it was for us to revisit our
14 conclusions about tritium from the TIB-75
15 review with this larger database which we have
16 done. Our review is now essentially complete.

17 I have gone over it and it has either gone to
18 the DOE or will go to the DOE in the next few
19 days.

20 And so are you doing a parallel
21 sort of approach to this? We had suggested we

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1 roll up all the reactor areas. We've done
2 that. We've looked at whether the larger
3 database if we have the same conclusions or
4 not as before and I can tell you that
5 generally the conclusions are about the same.

6 And we had some questions about the database,
7 too.

8 DR. TAULBEE: I think this is
9 going to be an issue that's going to be a very
10 lengthy discussion when we get your report and
11 when you get ours, because I don't think our
12 conclusions are matching.

13 DR. MAKHIJANI: Right, right, but
14 I thought that we were going to go first and
15 then you would review that and now we'll have
16 two sort of competing reports. I mean it
17 doesn't matter to me, but that was my
18 understanding is that we were reviewing the
19 database that you would put up and that you
20 would respond to that. But it's fine.
21 Whatever Mark and the Work Group wants.

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1 CHAIRMAN GRIFFON: Yes. I mean it
2 seems like it's far along on both parts, so I
3 don't think we -- I think we should stay with
4 what we got right now.

5 DR. MAKHIJANI: Yes, right. Fair
6 enough.

7 CHAIRMAN GRIFFON: And do both in
8 the meeting. So I have two actions that SC&A
9 is completing. I guess it's in the final-
10 review stage.

11 DR. MAKHIJANI: It's done.

12 CHAIRMAN GRIFFON: And NIOSH will
13 respond to the CW and NCW issue in a separate
14 response probably by early to mid-December,
15 right?

16 DR. TAULBEE: That's correct.

17 CHAIRMAN GRIFFON: Okay.

18 DR. MAKHIJANI: Okay.

19 CHAIRMAN GRIFFON: I think we can
20 move on to ten, Arjun.

21 DR. MAKHIJANI: Yes, okay.

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1 Tritides, as you see there, we participated
2 with NIOSH in a tritide-related document
3 review. Interviews have been cleared and they
4 are being finalized, reviewed by interviewees,
5 finalized. We were supposed to ask Joyce
6 about two specific tritides and their
7 solubility, lanthanum-nickel-aluminum tritide
8 and palladium-rhodium tritide, if I'm reading
9 this right, and we couldn't find any
10 information about -- or data on the solubility
11 of these two tritides. We didn't look a whole
12 lot, but I consulted with Joyce and we had
13 nothing ready to hand so we're waiting for
14 NIOSH for this.

15 On the dose reconstruction model,
16 we were waiting for NIOSH to issue its dose
17 reconstruction report and hear how you
18 distinguish between CW and non-CW. We're not
19 saying it applies in all cases.

20 So that's where we are. We have
21 just this one action item outstanding that

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1 interviewees have to still respond. There
2 will probably be another round of DOE review
3 after that.

4 DR. TAULBEE: Okay, this is Tim
5 Taulbee with NIOSH. We're at basically the
6 same, maybe a little bit farther behind than
7 you are with the interviews. We're still in
8 the process of documenting those and
9 finalizing them. We have not sent them back
10 to the interviewees for their review yet. And
11 I was surprised that you all have, but okay.

12 DR. MAKHIJANI: Well, you know, I
13 haven't talked to Kathy about this in a couple
14 of weeks, so that was my understanding. Kathy
15 did review this document before I sent it out.

16 It says they have not yet been reviewed by
17 interviewees. I can't tell from here if they
18 have gotten them, but I presume they have.

19 DR. TAULBEE: Okay. So once we
20 get ours documented, we'll send them back to
21 the interviewees, as well, to get them

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1 finalized.

2 With regards to the two tritides
3 that are listed. I do have one update, Mark,
4 that you should be aware of on the lanthanum-
5 nickel tritide. The Savannah River Site is
6 actually conducting a solubility study on that
7 particular material in conjunction with
8 Lovelace. And those results are expected by
9 the end of the year, at least that was their
10 schedule that I heard back in the August time
11 frame. Whether that occurs or not by the end
12 of the year, I don't know. I have not gotten
13 an update from the site, but they are actually
14 analyzing the lung solubility of that
15 particular material.

16 CHAIRMAN GRIFFON: Okay. And
17 Arjun, if I'm understanding item 2 correctly,
18 you might have said this while I was making
19 notes and I might have missed it, that you did
20 -- when you say SC&A has found no information
21 --

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1 DR. MAKHIJANI: I just asked
2 Joyce, you know. She is sort of our go-to
3 person on this, whether there's any ICRP data
4 and so on and she looked some and couldn't
5 find any.

6 CHAIRMAN GRIFFON: Okay, all
7 right. So I think that's pretty clear. The
8 actions there are pretty clear, right?

9 And the third item, Tim, the model
10 for tritides, obviously, is dependent on some
11 of this other work. Is that -- what is the
12 expectation with regard to your approach?

13 DR. TAULBEE: Our approach is,
14 once we get these interviews finalized, we'll
15 be writing up a report on the particular metal
16 tritide exposures at the Savannah River Site.

17 And I don't have a time line for that yet.
18 I'm kind of backlogged here a little bit with
19 the interviews and many of these other reports
20 we're trying to get out. So I don't have an
21 idea. My gut tells me it will be after the

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1 February Board meeting before we would have
2 something resolved on metal tritides for
3 Savannah River.

4 In other words, given the time
5 lines --

6 CHAIRMAN GRIFFON: No, that's
7 fine. I was just making notes. I wasn't
8 shocked or anything.

9 DR. TAULBEE: Okay.

10 CHAIRMAN GRIFFON: But you're not
11 necessarily waiting for this Savannah River
12 Lovelace study or is that a factor in this?

13 DR. TAULBEE: It is a little bit,
14 yes. Well, not really.

15 CHAIRMAN GRIFFON: If it's
16 available, you'll consider it, right, that
17 kind of thing?

18 DR. TAULBEE: That is correct,
19 yes. That is correct. That's a better way to
20 say it. I think once we make the interviews
21 available to the Board Members as well, I

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1 think you'll begin to get a little better
2 clear view of the exposure potential in
3 dealing with these materials.

4 I know that Phil and Brad have
5 definitely heard all of the discussions that
6 we had going on and so they have a really good
7 feel for these, I hope.

8 CHAIRMAN GRIFFON: Arjun, anything
9 else to add on that one?

10 DR. MAKHIJANI: Sorry?

11 CHAIRMAN GRIFFON: Anything else
12 to add on that item?

13 DR. MAKHIJANI: No, no, no.

14 CHAIRMAN GRIFFON: Okay, go ahead
15 with Item 11.

16 DR. MAKHIJANI: Item 11, well,
17 NIOSH has said that they're waiting for
18 guidance from you. We have a partial list.
19 It's stated here that they got much more than
20 what you see here, other than what NIOSH has
21 published. We'll send that to DOE for review

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1 by mid-November along with a whole bunch of
2 other stuff, but basically we're waiting to
3 hear from NIOSH about a dose reconstruction
4 approach and they said they're waiting for
5 Board guidance. So I don't know where we are
6 on this.

7 DR. TAULBEE: This is Tim Taulbee
8 with NIOSH. I'd like to get some
9 clarification here. What we had asked for was
10 from this list of all these radionuclides --

11 CHAIRMAN GRIFFON: Arjun, can you
12 mute when you're --

13 DR. MAKHIJANI: Yes, sorry.

14 CHAIRMAN GRIFFON: Thanks.

15 DR. TAULBEE: Okay. What we're
16 asking for clarification here is that we have
17 gross alpha analysis that was done for urine,
18 gross beta analysis and gamma as well and we
19 have whole body count data. So what I'm
20 asking for is these exotic radionuclides,
21 which ones are you all concerned about that

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1 would not be covered by the bioassay methods
2 that were employed at the site? I'm not
3 seeing any that are causing any concern to us,
4 so that's what I'm asking for your feedback
5 on.

6 CHAIRMAN GRIFFON: And I guess
7 that's really a question for SC&A. I'm not
8 sure.

9 DR. MAKHIJANI: You know, I don't
10 know what extent of investigation we should
11 do. To some extent, this is reminiscent to me
12 of the Y-12 discussion that we had and Jim
13 Neton is on the line. Y-12; it was said that
14 there was no exposure potential and there may
15 have been incidents in there, but they're all
16 well documented and it turned out there was no
17 data. The SEC was partly based on that and it
18 was the same kind of thing, half the periodic
19 table was produced at Y-12. So this seems, at
20 least on the surface, reminiscent of that
21 discussion and there's also broader Board

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1 discussion, as you know, Mark. When you say
2 there's no exposure potential, what do you
3 have to do to establish that? So if there's
4 any guidance on what you want us to do, we're
5 happy to do it. But there is a long list of
6 radionuclides. We haven't seen data on it and
7 I don't know -- I'm open to where you want to
8 go with this or what you would like us to do.

9 Hello? Hello?

10 CHAIRMAN GRIFFON: Oh, I'm sorry.

11 I put it back on mute instead of taking it
12 off. I was saying this is the listing -- all
13 of these radionuclides were sort of short-term
14 campaign whereas Savannah River was in the
15 business of producing these nuclides, right?
16 Is that correct?

17 DR. TAULBEE: This is Tim Taulbee.

18 Yes, that's correct, they were producing
19 these and they had bioassay for gross alpha.
20 They had gross beta, mixed fission products
21 and assay activation.

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1 CHAIRMAN GRIFFON: So NIOSH's
2 position is that the general bioassay program,
3 even though they didn't have any nuclides
4 specific necessarily for these, the general
5 program would allow NIOSH to bound them using
6 personal data, right?

7 DR. TAULBEE: That's correct.

8 CHAIRMAN GRIFFON: I guess, Arjun,
9 that's where SC&A needs to weigh in.

10 DR. MAKHIJANI: Okay, my
11 suggestion would be that it might be more
12 efficient for us to see how NIOSH is going to
13 use that data because they haven't yet said
14 how they're going to use the fission-product
15 data to do dose reconstruction on construction
16 workers and maybe once we looked at that, we
17 can comment at that time. There's work you
18 want us to do now in terms of seeing whether -
19 - I mean fission product data, I imagine, are
20 largely related to the reprocessing of waste
21 tank operations and so on. If you want us to

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1 look at whether there's any overlap where
2 these radionuclides were worked on and where
3 the fission product exposure might be, we can
4 do that, but -- or we can wait until we see
5 NIOSH's approach to fission products.

6 And some of these are not fission
7 products. I don't know where you go with
8 that.

9 CHAIRMAN GRIFFON: Clearly, some
10 are not fission products, yes. I guess if you
11 think it would clarify things, once you saw
12 NIOSH's approach on fission products, would
13 that be --

14 DR. MAKHIJANI: I think for any of
15 them, since NIOSH is saying we have a general,
16 unless I misunderstood, Tim, that we have a
17 general sort of bioassay program. A few of
18 these are repeats from radionuclides we
19 already covered like cobalt and neptunium and
20 so on. And many of them are in the middle of
21 the periodic table, but some of them are not:

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1 iridium-192, protactinium-231, plutonium-238
2 and so on.

3 CHAIRMAN GRIFFON: I've got to say
4 most of the transuranic types were covered in
5 earlier issues, weren't they?

6 DR. MAKHIJANI: Yes, they are.
7 But not all.

8 CHAIRMAN GRIFFON: Not all, yes.

9 DR. MAKHIJANI: Americium-243m
10 would be one that's staring at me from this
11 list that's in front of me.

12 CHAIRMAN GRIFFON: And U-233, I
13 don't think that was --

14 DR. MAKHIJANI: Yes, U-233, we
15 have covered that.

16 CHAIRMAN GRIFFON: Right.

17 DR. MAKHIJANI: Because we punted
18 on uranium for the moment until we look at
19 tritium.

20 CHAIRMAN GRIFFON: I mean I don't
21 know if you can in a short statement, Tim,

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1 possibly just describe how -- if you had a
2 situation where a worker were potentially
3 exposed to one of these quote unquote exotics
4 such as U-233, not listed in other areas of
5 our actions, how that would be treated. I'm
6 assuming that you would use gross alpha and
7 then assume they had potential for several
8 different nuclides and take the worst case for
9 internal dose. I'm not sure, though. Is that
10 what we want to sort of get an answer on,
11 Arjun, how --

12 DR. MAKHIJANI: Yes, I'm a little
13 worried about this because we've got a couple
14 of layers of problems here. We've got three
15 radionuclides that were produced in a
16 particular area of Savannah River site but
17 separate from the reprocessing plant and then
18 some of these went through some kind of
19 separations process to extract them and some
20 of them may not have. I'm not sure. I
21 haven't researched it.

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1 So the first thing to establish is
2 whether the workers who worked with these
3 things, whether the bioassay data of fission
4 products that's available or gross alpha,
5 whatever, has anything to do with the workers
6 who are handling these materials. So if they
7 didn't -- and bioassay data is not applicable,
8 would not be applicable to these workers.

9 The second thing is we have this
10 big issue of construction worker versus non-
11 construction worker data that, in this context
12 might be particularly difficult because you
13 know, they were doing similar -- it's very
14 clear that they were doing similar kinds of
15 work and that their exposure potential was
16 comparable, sometimes less, sometimes more
17 than nonconstruction workers, DuPont workers.

18 CHAIRMAN GRIFFON: Here's what I
19 want to ask --

20 DR. MAKHIJANI: I don't know where
21 we go with that. I'm open to whatever your

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1 guidance is.

2 CHAIRMAN GRIFFON: Here's what I
3 like to have, Arjun. My feeling is that
4 possibly SC&A should take a closer look at
5 this and if you could, it might be in the
6 original report it got much more granularity,
7 I'm not sure. But if you can go through this
8 list and sort of edit it because some of these
9 are already addressed in other areas of our --

10 DR. MAKHIJANI: Okay, sure.

11 CHAIRMAN GRIFFON: But then also
12 give more -- if it's not in your original
13 report, provide a little more granularity, at
14 least some examples if one of these other
15 isotopes like U-233; if it was in a particular
16 production area, give a little more
17 specificity on why you -- I think part of the
18 finding has to point to the issue of you don't
19 think it can be reconstructed with the data
20 available. So I think you have to sort of --
21 it might be in your original report. I'm not

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1 sure.

2 DR. MAKHIJANI: It's not. There's
3 no report on dose reconstruction aspects for
4 exotics. We're just compiling a list to see
5 what might have been produced, when, what
6 documents are part of the database. We
7 haven't done anything more than that. It's
8 just very, very minimal.

9 CHAIRMAN GRIFFON: Let me ask you
10 to edit the list a little bit, and to the
11 extent you can, provide a little more
12 specificity about some of the concerns,
13 whether these were like short-term things --

14 DR. MAKHIJANI: Could I request
15 that we see from Tim why he thinks that
16 fission -- or NIOSH, why they think that
17 fission product data is applicable to so many
18 of these things and whether they were viewed
19 in the same main areas for a fission product?

20 We can do that, that's fine. That's not a
21 problem, but normally we respond to NIOSH when

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1 they say how they're going to do this. The
2 concern is we haven't seen that.

3 CHAIRMAN GRIFFON: They are going
4 to provide the fission product report for the
5 other item, right?

6 DR. MAKHIJANI: Right, right.

7 CHAIRMAN GRIFFON: If you can do
8 this in the meantime, it may not answer the
9 question, but it might move the ball a little
10 down the road.

11 DR. MAKHIJANI: Sure, we can do
12 that.

13 MEMBER GIBSON: Hey, Mark.

14 CHAIRMAN GRIFFON: Yes, go ahead,
15 Tim.

16 MEMBER GIBSON: This is Mark.

17 CHAIRMAN GRIFFON: Oh, Mark, hi.

18 MEMBER GIBSON: This issue we're
19 talking about sounds really familiar, almost
20 similar to what went on at Mound when we had
21 problems there with the bioassay program

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1 during the production years. Is that
2 basically what we're talking about, where they
3 just tried to use bioassay sampling and didn't
4 look at the specific isotope?

5 CHAIRMAN GRIFFON: Yes, I think
6 the question is, you know, these people were
7 under a general bioassay program and there is
8 data, but will it sort of -- can NIOSH use
9 this for these particular campaigns of exotics
10 that intermittently occurred over the years.
11 I guess that's the question, Mike. Yes. So
12 it has some similarity to some of the Mound
13 stuff. Same kind of issue, but I don't think
14 we're far enough along to figure out the
15 specifics.

16 MEMBER GIBSON: Right. I just
17 wanted to say I'm very interested in this
18 issue, too.

19 CHAIRMAN GRIFFON: Yes. Okay.

20 MEMBER GIBSON: Thanks.

21 CHAIRMAN GRIFFON: Thank you.

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1 Let's go on to 12, Arjun, if you could.

2 DR. MAKHIJANI: I was on mute.
3 Number 12 is the incidents question. Just a
4 second. Internal dose incidents. We have --
5 have we sent -- did we send you a list of
6 incidents or this at DOE right now? Let me
7 see. No, our internal report is complete. I
8 will send you a list.

9 The short of it is that we found
10 many incidents and we agree that they're not
11 all in the Special Hazards Investigation
12 Index, but there are also other repositories
13 of incidents and we found that none are
14 complete. And in fact, year to year there's
15 lots of incidents that were not recorded and
16 that confirms what people have said in
17 interviews. It also addresses part of what
18 Bob Warren had been saying which is sort of
19 the additional item at the end of this list.

20 CHAIRMAN GRIFFON: Just to stick
21 to the action.

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1 DR. MAKHIJANI: So the action item
2 is that this report is essentially ready and
3 it will go to the DOE for review soon and
4 NIOSH will get it and the issue will be how
5 are we going to reconstruct doses.

6 CHAIRMAN GRIFFON: Do you think in
7 three weeks or so it should be through DOE?

8 DR. MAKHIJANI: Yes, this is
9 essentially complete.

10 DR. TAULBEE: This is Tim Taulbee.
11 Just for my own clarification, you've written
12 a report where you've identified some
13 incidents and a discussion of this particular
14 issue --

15 DR. MAKHIJANI: Yes.

16 DR. TAULBEE: -- and you're going
17 to be sending that to us. Okay.

18 DR. MAKHIJANI: Yes, and we not
19 only identify incidents, we've also gone
20 through documentation as to whether there are
21 databases where data and documents that

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1 indicate whether incident compilations are
2 complete or not. And as indicated here, at
3 least in the early years through to the mid-
4 '60s or early '70s, incidents don't appear to
5 be complete.

6 CHAIRMAN GRIFFON: And we'll save
7 our discussion on that.

8 DR. MAKHIJANI: Exactly.

9 CHAIRMAN GRIFFON: Whether the
10 current versions will bound -- incorporate
11 these or bound these or -- yes, okay.

12 DR. MAKHIJANI: Now this report
13 has been sent to the Work Group. The next
14 matrix Item 13, report was sent to the Work
15 Group on July 21st. We were asked to review
16 whether we were making consistent statements
17 with what our analysis of TIB-52 had been and
18 our statements in the context of a Savannah
19 River SEC. We found that it didn't change any
20 position, that our statements had been pretty
21 consistent and we sent that report along to

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1 the Work Group.

2 As part of this item, there's also
3 a logbook review. We have finished the
4 verification review of the four logbooks that
5 Tim talked about and that is currently in
6 internal review. I got that from Bob Barton
7 two days ago, something like that.

8 CHAIRMAN GRIFFON: So it should be
9 completed early for DOE?

10 DR. MAKHIJANI: Yes. It is done.
11 There was a fair amount of work to be done
12 and we had to go through a long QA check and
13 that is all complete now and we'll be sending
14 that to DOE pretty soon.

15 CHAIRMAN GRIFFON: Tim, anything
16 to add there, clarify?

17 DR. TAULBEE: The only thing that
18 I have to add is that there is a revision to
19 OTIB-52 that is in the works. It's currently
20 in comment resolution and so that's where that
21 one's at. So there will be a revision to

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1 OTIB-52.

2 CHAIRMAN GRIFFON: Can you notify
3 SC&A when that's complete? Because I think
4 SC&A should probably -- well, I'm not sure
5 whether this falls under Procedures Review or
6 whatever, but it definitely overlaps with
7 this. I think you need to review it in the
8 context of Savannah River SEC.

9 DR. TAULBEE: Right.

10 DR. MAKHIJANI: That's the only
11 context we've been looking at it here.
12 There's a statement about plutonium bioassay
13 data from the Savannah River site that has
14 been the subject of a separate review, by us
15 on Savannah River site in the course of this
16 work. A little bit earlier, maybe April,
17 earlier this year.

18 CHAIRMAN GRIFFON: So I put that
19 the third action of NIOSH is completing our
20 revision of TIB-52 and SC&A will review it
21 when available in the context of SRS SEC.

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1 DR. MAKHIJANI: Right. Open-pan
2 burning. NIOSH is compiling air data and we
3 looked at this briefly from the point of view
4 of construction workers versus non-
5 construction workers and have -- we've gotten
6 no formal action item on this pending and I've
7 reported our brief sort of findings on this
8 update, and we hope that NIOSH will address
9 these issues as it proceeds with its air
10 monitoring data review.

11 DR. TAULBEE: This is Tim Taulbee
12 with NIOSH. Yes, we do have, again, the draft
13 report that is in the beginning stages of
14 comment resolution, let's put it that way. I
15 have seen it, but there's some more work that
16 needs to be done on that. And it does address
17 most of the issues that you've listed here,
18 but there's a new one that you issued that it
19 doesn't address and I'm not sure if you want,
20 Mark, if you want SC&A to expand upon it. And
21 that's the issue of the external exposure

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1 geometry of some of the workers around the
2 burning ground area.

3 Our initial response was just upon
4 the internal side for open-pan burning of
5 contaminated solvents and the analysis of that
6 air data. So that's all that's in this
7 current report and that was all we were going
8 to do at this point.

9 I guess my preference, Mark, if
10 you're agreeable to this, would be to let us
11 issue our report and then if SC&A, who I'm
12 sure will be reviewing this report, would like
13 to introduce other comments or something along
14 the external exposure at that time, they can
15 elaborate on what it is and then we'll address
16 it from that standpoint, but I'd like to try
17 and issue the report as it is instead of
18 trying to expand the scope of the current
19 report, if that's agreeable, Mark?

20 CHAIRMAN GRIFFON: Yes, I think
21 that makes sense, especially if you're in the

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1 final stages of review of the drafts, right?

2 DR. TAULBEE: Yes.

3 CHAIRMAN GRIFFON: So I think we'd
4 rather see it than hold it up, you know.

5 DR. MAKHIJANI: Yes, Mark. I
6 agree with that, too. This external exposure,
7 it just came up in the course of just looking
8 at these documents. It was some pretty
9 graphic documents about the transport of this
10 waste. So I mentioned it for the sake of
11 completeness, but I think since NIOSH already
12 is looking at geometry in the context of
13 another matrix item, this piece -- we'll
14 review the Burning Ground piece and put this
15 in there, but the external exposure piece
16 probably better be dealt with in the context
17 of path modeling probably. Yes, it's a
18 geometry issue.

19 CHAIRMAN GRIFFON: Can I just
20 clarify that one, Arjun. Can we drop the
21 external geometry issue from this item,

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1 assuming that it's going to be addressed in
2 the other section?

3 DR. MAKHIJANI: Yes, I think it
4 might actually be more efficient to do that.
5 I just put it here because it came up in this
6 context and I think it might be more efficient
7 to put the external exposure geometry in the
8 text, in the Burning Ground in the other item.

9 CHAIRMAN GRIFFON: If you're
10 agreeable, I think that would work.

11 DR. MAKHIJANI: That's fine with
12 me.

13 CHAIRMAN GRIFFON: Is that okay,
14 Tim? Does it make sense?

15 DR. TAULBEE: Yes, it does.

16 CHAIRMAN GRIFFON: Okay. Go ahead
17 to item 15.

18 DR. MAKHIJANI: Well, 15 and 16,
19 we've been talking about this ICP
20 implications. Here we are -- this is an item
21 on the tritium report. We've been talking

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1 about tritium and uranium and data adequacy
2 and we agreed to do tritium first and we have
3 done some of the preliminary or substantive
4 status in giving to you there. I believe it
5 is at the DOE for review right now or may be
6 going in the next day or two.

7 DR. TAULBEE: And as I mentioned,
8 Mark, again, this is Tim Taulbee at NIOSH. As
9 I mentioned our report should be coming end of
10 this month, early December, most likely early
11 December, given the Thanksgiving holiday.

12 CHAIRMAN GRIFFON: Okay, so those
13 both are in review and should be early
14 December, right?

15 DR. TAULBEE: Yes.

16 DR. MAKHIJANI: And then the next
17 two items, neutron dose reconstruction, and I
18 don't believe we have anything from NIOSH on
19 that.

20 DR. TAULBEE: That is correct.
21 The 1962 -- let's see, start with Issue 17.

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1 Prior to '61, again, this is one that's been
2 pushed out, unfortunately, but we're looking
3 at the -- post the February Board meeting
4 before we'll have anything to you all. The
5 '62 to '71 time period, this would be matrix
6 issue 18. I do hope to get a draft, actually
7 a report out to the Board in early January
8 concerning that particular issue. But I don't
9 have any clearer date other than that at this
10 time.

11 CHAIRMAN GRIFFON: Okay. I think
12 we can go ahead on to Issue 19.

13 DR. MAKHIJANI: Nineteen. Yes,
14 this was a reactor incident question where a
15 worker had mentioned there was an incident in
16 the Heavy Water Components Reactor. We looked
17 quite a bit for evidence of this. We didn't
18 find any. We went back to the worker to see
19 if we could get more specific information. He
20 didn't have any more information and so we
21 requested reactor investigation lists to see

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1 if we could find something, but basically, we
2 didn't find anything. If the Work Group would
3 like to give us more direction as to how much
4 to pursue this and what to do with it, because
5 it's not clear to us how much more to pursue
6 this.

7 CHAIRMAN GRIFFON: And so -- I'm
8 sorry, the interview didn't really give you
9 any leads, is that what --

10 DR. MAKHIJANI: Yes. There was
11 some specific information, a crack in the core
12 of a Heavy Water Components Test Reactor and
13 we didn't find any accident corresponding to
14 this description. We have no date.

15 CHAIRMAN GRIFFON: This isn't the
16 one -- I mean, I remember when we did the
17 tour, one was mentioned there was a crack, but
18 I don't think it was this reactor.

19 DR. MAKHIJANI: Yes, I mean I
20 found a couple of documents indicating a
21 reactor named just like this, just from

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1 memory. I haven't written a report or
2 anything on this since essentially we came up
3 with no firm documentation about what might
4 have happened.

5 CHAIRMAN GRIFFON: It seems like a
6 fairly big accident that would be pretty well
7 documented and known of, you know?

8 DR. MAKHIJANI: Yes, so maybe
9 we'll just wait to see what we get, if we get
10 anything more from Savannah River Site records
11 about reactor investigations, to see if we can
12 find anything and let it be pending for now.

13 CHAIRMAN GRIFFON: Yes, was this
14 mentioned in the petition or did just come up
15 afterwards?

16 DR. MAKHIJANI: No, this came up
17 in the interviews that we did in January of
18 last year in Augusta, if I remember right.

19 CHAIRMAN GRIFFON: But in the
20 interview there weren't enough specifics to
21 really --

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1 DR. MAKHIJANI: That's right. So
2 we did go back to the worker and ask if we
3 could get more specifics. They told us what
4 they remembered.

5 CHAIRMAN GRIFFON: I'm just asking
6 to the extent we can close this, NIOSH, in
7 your research, Tim, have you guys run across
8 any such incident that would fit this
9 description?

10 DR. TAULBEE: Not for HWCTR, the
11 Heavy Water Components Test Reactor, no, we
12 have not. We did run into some information of
13 the R Reactor, part of why it was shut down so
14 early was there was some cracking, not in the
15 core, but in the vessel itself that was
16 causing leaks. But that's as close as what I
17 can get to something like this of a crack that
18 was causing problems, but that wasn't this
19 reactor. That was our reactor.

20 CHAIRMAN GRIFFON: That's the one
21 we saw in our tour, right?

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1 DR. TAULBEE: No, we saw C Reactor
2 in our tour.

3 CHAIRMAN GRIFFON: Okay. I
4 remember hearing something about a crack in a
5 vessel. It wasn't the core itself.

6 DR. MAKHIJANI: So my suggestion
7 is this be kind of tentatively closed and
8 until we hear from reactor investigations,
9 unless you want us to do more work. I can't
10 imagine what that would be.

11 CHAIRMAN GRIFFON: Yes, I don't
12 know. It's kind of a dead-end thing.
13 Tentatively closed, I agree.

14 DR. MAKHIJANI: Okay, next NIOSH
15 developing the model on external geometry and
16 I see I've put the burning ground item in
17 here, too, so it's in two places. I'll just
18 delete it from the other place.

19 CHAIRMAN GRIFFON: Thank you.

20 DR. MAKHIJANI: And so we were
21 waiting to see NIOSH's model.

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1 DR. TAULBEE: Again, this is --
2 wait a minute, I'm sorry. This is Issue 20,
3 right? This is the exposure geometry for the
4 tank farm, okay. Where we're at with this
5 one, is again we have a draft report that's
6 written. It's in comment resolution at this
7 time. It has been significantly delayed. I
8 had expected it to be out at the beginning of
9 or about the mid part of October, but it's
10 going to take a little longer due to staffing
11 and priorities.

12 CHAIRMAN GRIFFON: So any
13 expectation?

14 DR. TAULBEE: My expectation is
15 that I'm hoping early December, but most
16 likely January.

17 CHAIRMAN GRIFFON: And Tim, I
18 think I might be stating the obvious, but it
19 would assume that you didn't consider the
20 burning ground --

21 DR. TAULBEE: No, we did not.

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1 DR. MAKHIJANI: You know, what I
2 can do, Mark -- sorry, Tim.

3 DR. TAULBEE: May I go ahead?

4 DR. MAKHIJANI: Yes, what I can
5 do, you know, I can put the documents where we
6 found this in a folder and send you an email
7 and Mark and send the Work Group an email and
8 you can see where this item came from and take
9 it where you would like.

10 CHAIRMAN GRIFFON: Okay, and it
11 may end up we can track it as a separate item
12 or say that it was adequately addressed in the
13 response to 20 if that turns out to be true,
14 you know. Is that okay on a path forward,
15 Tim?

16 DR. TAULBEE: Yes, that sounds
17 fine. I'm hoping that the sooner you can get
18 us that information, the better.

19 DR. MAKHIJANI: Before the end of
20 the week, I'll create a folder and send you an
21 email.

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1 CHAIRMAN GRIFFON: Okay, thank
2 you. Put that as an action that SC&A will put
3 info related to Burning Ground area.

4 DR. MAKHIJANI: Yes.

5 CHAIRMAN GRIFFON: Okay.

6 DR. MAKHIJANI: Next item is
7 external adequacy. We've resolved this
8 through HPAREH and OTIB-62 to review and a
9 number of other things, so we don't this an
10 SEC issue, at least we have no issue with
11 external data adequacy, so far as dose
12 reconstruction feasibility is concerned.

13 CHAIRMAN GRIFFON: The only
14 hesitancy I have here is I'm not sure the Work
15 Group closed this as an SEC issue.

16 DR. MAKHIJANI: Sorry, I think we
17 closed this as an SEC issue on the 5th of May.
18 I'll have to go back and see.

19 CHAIRMAN GRIFFON: I just wanted
20 to check the transcripts, but if that's the
21 case, at the very least we have concurrence

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1 from SC&A that it's --

2 DR. MAKHIJANI: Yes, we don't
3 believe --

4 CHAIRMAN GRIFFON: Face-to-face, I
5 would just ask that we check in again on that
6 and make sure the Work Group is all okay with
7 SC&A and NIOSH's outcome.

8 Okay --

9 DR. MAKHIJANI: And I'll look in
10 the transcript and try to send you, if there's
11 a piece, I'll send you a page reference.

12 CHAIRMAN GRIFFON: Okay. And then
13 22 and 23?

14 DR. MAKHIJANI: We did that. We
15 posted the interviews of the summary on the O:
16 drive on the 20th of June. And 24, there's no
17 action item recorded. And 25 has been merged
18 with 14. So that's the end of the -- other
19 than these additional matters --

20 CHAIRMAN GRIFFON: Twenty-two and
21 23, you posted these interview summaries and

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1 is that as far as we got with that?

2 DR. MAKHIJANI: I mean really
3 using the interview summaries in our own
4 analysis as you heard me kind of sprinkle
5 through my comments here and you'll see that
6 in our reviews also, but since we also refer
7 to these interviews, we've been asked to post
8 interview summaries and we did that.

9 CHAIRMAN GRIFFON: But I mean, are
10 all these issues raised by the petitioners
11 addressed in separate actions in our matrix or
12 do we need --

13 DR. MAKHIJANI: There is a
14 spreadsheet, this is from memory from some
15 time ago, but there's also a spreadsheet that
16 is posted there with the petitioner items, if
17 I recall correctly.

18 CHAIRMAN GRIFFON: Okay, can I ask
19 that you just provide us, Arjun, with a review
20 of those items? Now that the interviews are
21 posted and everybody can look them over, can

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1 you provide us with a -- just run through
2 those items raised by the petitioner and make
3 sure that we've addressed them in our matrix
4 here.

5 DR. MAKHIJANI: I believe we have,
6 actually. And I'll send you something in
7 writing about that. This is also connected
8 with the next item. I will do that.

9 CHAIRMAN GRIFFON: These are
10 issues that we need to address, so we want to
11 make sure we don't miss any. Okay.

12 DR. MAKHIJANI: Initially, we were
13 going to do a longer report until it got --
14 you know, we decided to do it in pieces and we
15 compiled that petitioner-issued list in that
16 context. Yes, you're right. We will do that.

17 CHAIRMAN GRIFFON: Just provide a
18 memo report.

19 DR. MAKHIJANI: Yes. Sure. So
20 the next two items, 24 and 25, there's
21 nothing.

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1 CHAIRMAN GRIFFON: And can I ask
2 on 24, I know there was no action from SC&A.
3 I'm assuming there was no action for NIOSH,
4 but where does the issue stand? Can you just
5 flesh that out?

6 DR. MAKHIJANI: To my memory, I
7 think this matrix item has become merged with
8 all the other internal dose items because a
9 lot of those actually have to do with early
10 work, you know, thorium work, neptunium work,
11 although neptunium might have gone on.

12 So I don't know -- let me look at
13 the matrix item to see --

14 CHAIRMAN GRIFFON: If it goes
15 away, just let us know and we'll just delete
16 it.

17 DR. MAKHIJANI: Why don't I review
18 it to see if it goes away and maybe NIOSH can
19 review it too. Let me see what the full
20 matrix item says. I have the matrix here.

21 CHAIRMAN GRIFFON: Okay.

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1 DR. MAKHIJANI: Yes, I actually
2 think this item is covered in the other items,
3 but I'll send you something more formal about
4 that.

5 CHAIRMAN GRIFFON: That's fine.
6 And 25 is covered in 14, right?

7 DR. MAKHIJANI: That's right, it's
8 the same item.

9 CHAIRMAN GRIFFON: I'm going to
10 make that go away in our future discussions.

11 DR. MAKHIJANI: Okay.

12 CHAIRMAN GRIFFON: Yes. All
13 right.

14 DR. MAKHIJANI: And then there was
15 -- Bob Warren provided us -- he's the claimant
16 representative, and I believe he's on the line
17 -- provided us with some documents and there
18 was also some claimant information and we have
19 not reviewed the issues relating to the
20 specific claimants since we believe that was
21 outside of our scope in this SEC review. But

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1 we have reviewed the other documents and we
2 also reviewed the minutes of the NIOSH
3 Outreach meeting to which Bob Warren referred
4 to see whether the issues were covered in the
5 other matrix items.

6 And basically, I believe that they
7 are, a lot of them have to do with incidents
8 and whether incidents have been properly
9 recorded. Some of them have to do with non-
10 construction workers versus construction
11 workers. And some of them have to do with why
12 non-construction workers were excluded. Now
13 that last piece, you know, is not -- it's
14 basically a NIOSH, OCAS, DCAS decision. And
15 we're not reviewing that except as we come up
16 with non-construction worker issues that are
17 related to construction workers, according to
18 the direction from last time.

19 I don't believe that we need to
20 add any new matrix items and if you would
21 like, I can send you a memorandum of our

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1 review of these items. We do have quite a bit
2 of work that we did on this. It was done
3 mostly by Kathy Demers. I'd be happy to send
4 you something in writing.

5 CHAIRMAN GRIFFON: I think that
6 would be appropriate. Did you post this? You
7 say comments were entered into a spreadsheet
8 for easier tracking and sorting. Is this
9 available to --

10 DR. MAKHIJANI: This, we have not.
11 We have not posted anything like this. This
12 has been an internal review just to give you a
13 report and an update and to seek your guidance
14 as to where to go next.

15 We'll just kind of review
16 everything and clean it up and make sure it's
17 readable by third parties and then post it.
18 And I'll send you a memo.

19 CHAIRMAN GRIFFON: The memo and
20 your spreadsheet I think would be useful.

21 DR. MAKHIJANI: Yes, I will do

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1 that.

2 MR. KATZ: Arjun, this is Ted.
3 The materials that were submitted, are they
4 already posted on the Site Research Database?

5 DR. MAKHIJANI: You know, I think
6 so, but I will have to ask. I'm not sure,
7 Ted.

8 MR. KATZ: Okay, because that
9 probably should be done in conjunction with
10 this.

11 CHAIRMAN GRIFFON: Agreed.

12 DR. MAKHIJANI: Yes, sure.

13 CHAIRMAN GRIFFON: I mean this
14 sort of goes along with 22 and 23, but it was
15 sort of additional comments, right, beyond the
16 original piece.

17 DR. MAKHIJANI: Right. A lot of
18 it is actually around matrix Item 12 about
19 incidents and matrix Item 13 about
20 construction workers versus non-construction
21 workers.

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1 CHAIRMAN GRIFFON: Okay.

2 DR. MAKHIJANI: But you'll see
3 that in the memo I sent you.

4 CHAIRMAN GRIFFON: All right.
5 That will be good. We need to make sure -- if
6 the Work Group or SC&A are not covered in
7 other items, we need to address those
8 separately, so that will be good to see a
9 formal follow up on that.

10 Is there anything we missed just
11 as far as the status updates, Arjun or Tim?

12 DR. MAKHIJANI: I don't think so.

13 DR. TAULBEE: This is Tim. No, I
14 don't think so. I think that covers it.

15 CHAIRMAN GRIFFON: I guess the
16 only thing I would draw attention -- this came
17 up yesterday in our Fernald meeting. We did a
18 similar thing. I know that at the last full
19 Board meeting, we had heard some public
20 comment of how many Work Group meetings we've
21 had at the Savannah River Site and how long

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1 this has gone on.

2 I know I'm not telling anyone
3 anything they don't know already, but we do
4 have petitioners that are, I'm sure, quite
5 anxious to have resolution to this. So I
6 think we really need to try to push for a
7 face-to-face meeting to resolve many and/or
8 all these issues in the near future. I'm a
9 little concerned that some are definitely
10 going to push out beyond the next February
11 meeting it seems, but I do want to try to
12 schedule something. And I'm not sure what
13 time frame we should look at. I think we
14 should go for a meeting before the next full
15 Board meeting, possibly in mid- to late
16 January with the awareness that some of these
17 issues may not be ready by then. I don't know
18 what others think on that?

19 DR. MAKHIJANI: Mark, the latter
20 part of January and early part of February is
21 going to be -- is very, very uncertain for me.

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1 I would prefer the first part of January, the
2 latter part of February.

3 CHAIRMAN GRIFFON: I would say --
4 how about middle January or early-to-mid? I
5 don't think early is good.

6 DR. MAKHIJANI: Actually, January
7 is a horrible month for me, but you know,
8 because the second week of January is also
9 booked. I have the first week of January. I
10 could do it in the second week of January,
11 third week of January starting the 18th.

12 CHAIRMAN GRIFFON: So you could do
13 it the third week?

14 DR. MAKHIJANI: Yes. The problem
15 is my schedule for the last half of January is
16 uncertain, but I guess I'll work around the
17 Working Group.

18 CHAIRMAN GRIFFON: Tim, any
19 thoughts on that from NIOSH's standpoint?

20 DR. TAULBEE: From my availability
21 standpoint, the third week of January is good

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1 until Friday of that week, so Tuesday,
2 Wednesday, Thursday of that week. Also, the
3 first and second week of January is fine. I'm
4 kind of like Arjun, the end of January and the
5 first of February is already booked for me.

6 CHAIRMAN GRIFFON: And from the --
7 I mean what I gather from our discussion, a
8 lot of your actions will be complete by then.

9 There might be a few exceptions, but a large
10 degree of the work you expect to have
11 responses on these issues, right, by then?

12 DR. TAULBEE: That's correct.

13 CHAIRMAN GRIFFON: I don't want to
14 schedule when we're not going to be ready to
15 have some fruitful discussion.

16 DR. TAULBEE: From my list, Mark,
17 it looks like the tritium analysis that we'd
18 have, as well as Arjun would have SC&A's
19 response of that so that can be a lengthy
20 discussion, I'm quite certain, as well as we
21 had the polonium report that will be out. The

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1 Burning Grounds should be out by then as well.

2 And I'm hoping the exposure geometry as well,
3 and these again, I'm targeting early January
4 so if you were to schedule the 18th, 19th, or
5 20th, the Work Group should have a few weeks
6 to at least have read them and we can go over
7 them and begin to address questions on them.

8 DR. MAKHIJANI: And you'll also
9 have our thorium report and tritium report.

10 CHAIRMAN GRIFFON: How about
11 January 17th? Does that work?

12 DR. MAKHIJANI: That's Martin
13 Luther King Day.

14 CHAIRMAN GRIFFON: Oh, it is.
15 That's right. How about January 18th?

16 DR. TAULBEE: That works fine for
17 me.

18 CHAIRMAN GRIFFON: How about Work
19 Group members? Is there anything else
20 scheduled on that day, I should ask too?

21 MR. KATZ: January 18th is okay.

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1 It just means people will travel on Martin
2 Luther King Day, but that's fine.

3 MEMBER LOCKEY: Mark, what day is
4 that?

5 CHAIRMAN GRIFFON: It's a Tuesday.

6 MEMBER LOCKEY: Tuesday isn't a
7 good day for me because I have clinic.

8 CHAIRMAN GRIFFON: How about
9 January 20th?

10 MEMBER LOCKEY: That's a --

11 MR. KATZ: Thursday.

12 MEMBER LOCKEY: Hold on a second,
13 let me check.

14 CHAIRMAN GRIFFON: This will be in
15 your backyard, Jim.

16 Is everybody else okay with that
17 day?

18 DR. TAULBEE: The 20th works for
19 me. This is Tim Taulbee.

20 MEMBER LOCKEY: The 20th is good.

21 CHAIRMAN GRIFFON: It's good. Is

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1 it still okay with you, Arjun?

2 DR. MAKHIJANI: Yes. It's pushing
3 my envelope, but that's fine.

4 CHAIRMAN GRIFFON: Let's save the
5 20th and I will check in in early January on
6 the actions and if it looks like we're not
7 there, we may push this back, but I really
8 want to try to push on this because, as we
9 know, it's been going on for a long time.
10 Anything else, Ted?

11 MR. KATZ: No, that's good. Mark,
12 that sounds good. I was just going to say it
13 seems pretty clear from the amount of material
14 that we have that's going to be delivered and
15 then won't be delivered, but will be delivered
16 soon. We're going to need certainly two full
17 meetings anyway, so my only question is if you
18 want to try to book a meeting now for after
19 the February Board meeting or do you just want
20 to wait and see where we get with that first
21 meeting?

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1 CHAIRMAN GRIFFON: I'm having a
2 little trouble booking that far out. I'm
3 afraid to schedule something that later is a
4 conflict. I'd like to just stick with that
5 one.

6 The last thing I would like to say
7 for our conference call here is I know the
8 petitioner took time out of their day to dial
9 in, so if you have any comments, understanding
10 that this was sort of status call. There will
11 be much more substance at the meeting to
12 discuss. If you have any comments for the
13 record now, I would give you the opportunity
14 to make those, either Mr. Warren or Mr.
15 Anderson.

16 MR. WARREN: This is Bob Warren.
17 We still are looking at -- we'd like to see
18 the definitions of construction worker because
19 this is really important. If it's only done
20 for construction workers who work in the
21 subcontractors in the trade, or whether it was

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1 done, classify the workers in the front who
2 are doing construction. So that would be
3 helpful if somebody would give us how they're
4 going to do that.

5 CHAIRMAN GRIFFON: That's a good
6 point: clarification of how NIOSH is defining
7 construction work.

8 Tim, I think this is better
9 addressed when we start to talk about the
10 construction work that follows, right?

11 DR. TAULBEE: This is Tim Taulbee,
12 you're really breaking up there, Mark, due to
13 other interference. Could you repeat that,
14 please?

15 CHAIRMAN GRIFFON: I was saying
16 that the point is an important one, I think,
17 the definition of construction workers, but I
18 think you might want to address that when we
19 discuss coworker models and whether they bound
20 construction workers. I think Mr. Warren is
21 asking about how it's defined, whether it's

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1 subcontractors or whether it's -- is it
2 getting into those -- is it DuPont, the DuPont
3 workers as well?

4 DR. TAULBEE: I concur. I think
5 our analysis paper, as well as the tritium
6 analysis paper will help address that and we
7 can certainly go into more details on that
8 particular issue when we discuss that in
9 January. But it does include, it's not just
10 the construction trades or, what do I want to
11 say, the construction trades coming out of the
12 union shops. We also included the DuPont
13 construction trades workers that would be
14 doing more maintenance and so forth.

15 Back in August, we've since --
16 I've posted up on the Advisory Board's
17 directory under our -- I think it's your O:
18 drive, a description of the -- of who we
19 included in those construction trades. I'm
20 looking at it here as I'm speaking here to
21 make sure that it did get posted up there.

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1 But do you remember seeing anything like that,
2 Mark?

3 CHAIRMAN GRIFFON: You know, I may
4 have seen it, but is it on -- you're saying
5 it's on the publicly accessible?

6 DR. TAULBEE: No, not the publicly
7 assessable one. This would be the one
8 internal for you and the Advisory Board DCAS
9 documents, and it's the tritium description,
10 the description of the tritium files.

11 CHAIRMAN GRIFFON: I do remember
12 asking for this and I'm sure I looked at it a
13 while ago, but I'll look at it again. I'll
14 need to look at it again.

15 DR. TAULBEE: Okay.

16 CHAIRMAN GRIFFON: Is there any
17 portion of that that -- or will that -- this
18 report that you're going to provide for the
19 Work Group for the next face-to-face meeting,
20 that, I assume, will be cleared for the public
21 and the petitioner will be able to see that

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1 and see these definitions better? Is that
2 true or not?

3 DR. TAULBEE: It's currently not
4 true, but we could possibly add these job
5 titles to that as an appendix. We've got them
6 listed there and we can certainly add an
7 appendix to the report. It's not quite
8 finalized yet, but I will caution you that
9 this report is rather lengthy. The text
10 version of it is about 22 pages or so, but
11 when you add in all of the additional data and
12 analysis that was done, it balloons to about
13 350 pages. So it's a pretty big document.

14 CHAIRMAN GRIFFON: If you think
15 the description is clear without adding
16 another appendix with exact job titles, then
17 that's fine. I'll leave it up to your
18 judgment, but you understand the concern.

19 DR. TAULBEE: Yes, sir.

20 MR. KATZ: This is Ted. Isn't
21 there a way to just provide this information

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1 more simply to Mr. Warren? Does it really
2 have to be integrated into some larger report?

3 It seems like a relatively straightforward
4 question.

5 CHAIRMAN GRIFFON: Tim, I guess --

6 MR. KATZ: I'm not asking you --

7 DR. TAULBEE: You're asking me. I
8 don't know. Perhaps we could. I just hadn't
9 -- I don't know.

10 CHAIRMAN GRIFFON: If that's
11 possible, that might be good, too. That's a
12 specific question that I think needs to be
13 understood and transparent. I think everybody
14 needs to know how that is being defined and
15 some assurance that the workers, that they're
16 concerned about in the original petition, how
17 they're being handled.

18 DR. TAULBEE: Okay.

19 CHAIRMAN GRIFFON: At least
20 consider that and see if you can respond in a
21 separate response, maybe directly to that

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1 issue and then it wouldn't bring the other
2 report size up to 300 pages or whatever.

3 DR. TAULBEE: Okay.

4 CHAIRMAN GRIFFON: Anything else
5 for Mr. Warren or Mr. Henderson.

6 PUBLIC PARTICIPANT: Can any of
7 the public be allowed to speak?

8 CHAIRMAN GRIFFON: Yes, yes.

9 PUBLIC PARTICIPANT: I'd like to
10 speak up concerning many matters that have
11 been spoken here today.

12 CHAIRMAN GRIFFON: Can you just
13 give your name?

14 PUBLIC PARTICIPANT: Quite
15 frankly, I've been working for these cases for
16 the last ten years. We have claimants who
17 have been waiting for awardments for ten
18 years, walking around with cancer in their
19 body --

20 CHAIRMAN GRIFFON: Can I just --

21 PUBLIC PARTICIPANT: I want to go

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1 ahead and just explain some things here.
2 You're talking about incidents. You're talking
3 about you don't have clarifications of the
4 elements. Basically, the amounts the geometry
5 of those elements and how those are workable.

6 Concerning your IMBA software, I am concerned
7 that many people, claimants, those who worked
8 in the line of duty from the 1950s on up have
9 actually not had fair or fairness in all of
10 their cases due to the fact that we look at
11 these from the epidemiology side. We look at
12 them from the geometry side. We look at them
13 from the elements to the tissues to the
14 disease. We look at them from the toxins that
15 causes the individuals under the Worker's
16 Compensation law and yet many of these
17 claimants have been waiting ten years or
18 longer.

19 And here you're discussing that
20 you don't even have the variables. You don't
21 actually have the findings of exotic nuclides

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1 which you're talking about. You don't have
2 the findings concerning many of the elements
3 that should be completed probably years ago
4 from Savannah River Site and I have their
5 bible which I call the site bible, it's the
6 Site Technical Document. I have every piece
7 of law. I have over, I would imagine, 600
8 TIBs and PERs and every day there's a change
9 in this and a change in that. And there's a
10 conference here. And there's a conference
11 there.

12 But the claimants sit back and
13 they receive nothing but denial, denial,
14 denial, denial. These people, some of them
15 have been hit with plutonium, uranium,
16 cesium, cesium, californium. I know every
17 element. I can go through the book and tell
18 you these people have been hit. They have
19 received these diseases from their employment,
20 yet they sit back and they have to wait and
21 wait for you all to hold these type of

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1 conferences which I've been to many,
2 especially in Augusta. And concerning the
3 fact that these exposures to these claimants
4 were actually in those dosimetry records when
5 I calculate when you do your dosimetry
6 records, I go back in behind and then I go
7 back on the individual records of those
8 claimants and to the Site Technical Document
9 and through all of the PERS, TIBs, you name
10 it, I go through all of these things. And the
11 correlation between the two normally comes up
12 what I have which would be way above the
13 contamination levels of what you give the
14 claimant.

15 Because of ALARA and because of
16 IMBA, and so you take a scenario of someone
17 being hit with certain parameters, you are
18 able to lower the rate of radiation
19 contamination that the individuals receive and
20 so to get to a 50 percent causation is almost
21 an impossibility. And then under Worker's

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1 Compensation of the SBM which has all the
2 toxic substances that the individual was hit
3 with that would produce a disease for
4 awardment, it doesn't make a difference what
5 you turn over to you all in any form or
6 fashion. The ball game gets changed. Every
7 time you think you have won the ball game, a
8 curve ball is thrown your way under a TIB or a
9 PER under the S plutonium ruling and the same
10 thing. Many of them were upped on the S
11 plutonium ruling and many of them were lowered
12 under the S plutonium ruling.

13 So it's a catch-22 and the
14 claimants are dying. Their families are
15 watching them die and here we sit talking on
16 the phone, a bunch of jargon, God forgive me,
17 but it is jargon, because you sit here and the
18 money that's paying your salaries to me should
19 be going to the claimants.

20 So that's what I wanted to say
21 today. I have many people, many people who

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1 have worked with me and we have gone through
2 these things with fine-toothed combs and it's
3 as if whatever we find, no matter how you
4 document it, down to the letter of the law
5 with the Is and the Ts crossed, it comes to no
6 fruition for the claimants. Denial, denial,
7 denial.

8 And so I think you really need to
9 look into what you are doing here at these
10 conferences and how you all are putting this
11 out to the public because there are public
12 people, there are people on these lines
13 listening and to me to sit here and say well,
14 you really don't know about this and you
15 really don't know about that, well, then the
16 dose reconstructions could not actually be
17 valid dose reconstructions. If you do not
18 have concerning the tritium, the plutonium,
19 the celsium, the cesium, the californium, you
20 don't have actual data for certain years,
21 coworker under trade workers, non-trade

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1 workers, whatever, then no dose reconstruction
2 can actually be a valid dose reconstruction.

3 I just wanted to make those
4 comments and I can tell you right now I am for
5 the claimants. They are literally sitting in
6 denial many of them. Every time something is
7 returned, it is a denial, a denial, a denial.

8 I don't care. I've had people that have
9 actually had plutonium in a building so
10 contaminated that they know exactly how they
11 got hit -- incident. Little Hector.
12 Everybody knows about Little Hector. You all
13 may not know about Little Hector, but we all
14 know about Little Hector, and so there's
15 things there that perhaps you all don't know
16 that we know and that claimants know. And
17 many of these old, 80-year-old widows, they
18 are terrified to even speak about what
19 happened on the Site to their husbands who
20 didn't come home for two or three days and
21 then when they did send them home, they came

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1 home in such a way that some of them actually
2 didn't live very long afterwards. They won't
3 even hardly talk because they were afraid who
4 was going to come to their front door.

5 It's a very sad thing to have
6 someone in that type of mindset this many
7 years after their husbands worked at Savannah
8 River Site. But I'm quite telling you today,
9 to sit here and hear you all say this and that
10 about your databases and your geometry and I
11 do your chemistry and I do your geometry and I
12 go through the epidemiology. I go through
13 NIOSH and DOE and DOL and cases being lost and
14 things of that nature. There's so much that
15 actually you all need to look into -- that I
16 believe the claimants have a right to take
17 their hearts before Congress and let them know
18 what is going on because I have just numerous,
19 numerous people who say this is unfair. Maybe
20 this was to create jobs. This wasn't for the
21 claimants, because the claimants aren't

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1 getting the money. I can quite frankly tell
2 you that.

3 The claimants are not being
4 reparated. They're getting denial, denial,
5 denial. And when I see their dose
6 reconstructions, I know exactly what they're
7 hit with. When you put them in IMBA, it's
8 quite different when you put a dose
9 reconstruction through IMBA, believe me.

10 CHAIRMAN GRIFFON: Okay.

11 PUBLIC PARTICIPANT: I just wanted
12 to make my comments. Thank you very much.

13 CHAIRMAN GRIFFON: Thank you, and
14 I appreciate and I do appreciate your
15 frustration and all the claimants waiting on
16 this. We have raised this a couple of times
17 of the timeliness, but we also --

18 PUBLIC PARTICIPANT: Well, many of
19 the claimants have waited ten years. First
20 filers who should not be actually -- they
21 should be grandfathered back to what the

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1 original -- under the CFR 81 and 82 and the
2 CFR 30, Worker's Compensation. All of these
3 things that you look at them and when the
4 claimants came in, they came in with knowledge
5 of knowing there would be reparations for them
6 because they would receive a disease or had a
7 disease, cancer, in the line of duty which
8 would have to come up to a 50 percent
9 causation which the burden of proof was put
10 back on the claimants to bring that -- to be
11 able. They had to do all of it. They had to
12 get medical records. They had to do
13 everything. The very knowledge of them having
14 to do this, someone with cancer going back and
15 having to get all of this from their
16 physicians, their doctors.

17 CHAIRMAN GRIFFON: We do
18 appreciate your comment.

19 PUBLIC PARTICIPANT: I'm sure you
20 do.

21 CHAIRMAN GRIFFON: It is a

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1 complicated matter, but --

2 PUBLIC PARTICIPANT: No, it
3 shouldn't be complicated. It is actually A,
4 B, C, D. It is the work area to the element,
5 actually the tissue to the disease to the
6 reparation. It's a very simple A, B, C, D, E.

7 CHAIRMAN GRIFFON: Okay.

8 PUBLIC PARTICIPANT: It's not as
9 hard as you all are making it. You're making
10 it where the claimant cannot receive their
11 awardment because when you change amount on an
12 element that maybe in 1954 might have been 4.7
13 when you were hit with plutonium and then
14 later down the road you can change that to
15 maybe 1.5 on a dose reconstruction, then that
16 claimant can never get to 50 percent
17 causation.

18 There is a lowering amount of
19 those elements where you can't get there.
20 I'll take the scenario, a woman, both of her
21 breasts removed, had a 47.17 percent by S

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1 plutonium. The woman comes back and loses at
2 47.01 percent. Both breasts have been
3 removed. Cancer. Been there since the
4 inception of the plant from the '50s. Been in
5 every building. Been in every reactor. Been
6 contaminated to the limit. No reparation.
7 Denial.

8 This is what I'm saying, sir,
9 these claimants need to take this before
10 Congress. They need to be made aware of what
11 is going on. Congress needs to be made aware
12 that these claimants are suffering. They are
13 dying and they are not receiving money.

14 And I think this is what they
15 should do. They should take it up with the
16 Congress or a federal court because under the
17 present system, they get lost. The cases get
18 lost. The claimants' cases can't be found.
19 Or you get the wrong case, so, sir, there's
20 many things here that need to be looked into
21 and maybe you need to get a team that will

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1 actually go in and research why hasn't
2 Savannah River plant claimants -- it has been
3 put in for a special cohort facility, that has
4 been denied. That petition has been in for
5 quite some time. In fact, two petitions and
6 people have been waiting and waiting and
7 waiting and they're dying. They're dying.

8 CHAIRMAN GRIFFON: I appreciate
9 the --

10 PUBLIC PARTICIPANT: You all need
11 to look into your all's heart as you sit here
12 and say well, my date, the 17th, is not a good
13 date for me. And my date of February 15th
14 isn't a good day for me. Well, guess what? A
15 denial in a letter is not a good date for
16 anybody and everybody is getting their
17 denials. Denials.

18 CHAIRMAN GRIFFON: I appreciate
19 your comments.

20 PUBLIC PARTICIPANT: Now I think
21 you have to look into your hearts and go back

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1 to the Board --

2 CHAIRMAN GRIFFON: We are going
3 back to the Board and we will discuss
4 timeliness.

5 PUBLIC PARTICIPANT: Ten years,
6 sir --

7 CHAIRMAN GRIFFON: Very, very
8 concerned.

9 PUBLIC PARTICIPANT: -- is a lot
10 of time for people to wait to first filers.
11 These are first filers, sir, ten years.

12 CHAIRMAN GRIFFON: Yes, I
13 understand.

14 PUBLIC PARTICIPANT: Ten years.

15 CHAIRMAN GRIFFON: I understand.

16 PUBLIC PARTICIPANT: Hearing after
17 hearing after hearing.

18 CHAIRMAN GRIFFON: Listen, we will
19 be in Augusta again in February.

20 PUBLIC PARTICIPANT: I shall be
21 there, sir.

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1 CHAIRMAN GRIFFON: And we hope to
2 see you there.

3 PUBLIC PARTICIPANT: I will be
4 there. I will be there.

5 CHAIRMAN GRIFFON: We hope to have
6 more answers on Savannah River by then as
7 well. I appreciate --

8 PUBLIC PARTICIPANT: I don't think
9 you'll have the answers, sir. I think you'll
10 get more jargon out like you are right now,
11 sir. So, have a wonderful day.

12 COURT REPORTER: This is the court
13 reporter. Could the last speaker please
14 identify herself?

15 CHAIRMAN GRIFFON: I didn't catch
16 her name either.

17 MR. KATZ: That's okay. That's
18 voluntary on her part. She's not required to
19 identify herself.

20 CHAIRMAN GRIFFON: All right. Any
21 other comments, otherwise, we'll adjourn this

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1 Work Group meeting?

2 Okay, hearing none, Ted, I think
3 we're ready to adjourn.

4 MR. KATZ: Okay, we are adjourned.

5 Thank you, everybody.

6 (Whereupon, the above-entitled
7 matter went off the record at 3:11 p.m.)

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