

UNITED STATES DEPARTMENT OF LABOR

+ + + + +

ADVISORY BOARD ON TOXIC SUBSTANCES AND WORKER
HEALTH

+ + + + +

SUBCOMMITTEE ON SITE EXPOSURE MATRICES (AREA #1)

+ + + + +

MEETING

+ + + + +

MONDAY,
JULY 11, 2016

+ + + + +

The Subcommittee met telephonically at
1:00 p.m. Eastern Time, Laura Welch, Chair,
presiding.

MEMBERS

SCIENTIFIC COMMUNITY:

JOHN M. DEMENT
MARK GRIFFON

MEDICAL COMMUNITY:

STEVEN MARKOWITZ
LAURA S. WELCH, Chair

CLAIMANT COMMUNITY:

KIRK D. DOMINA
GARRY M. WHITLEY

OTHER ADVISORY BOARD MEMBERS PRESENT

FAYE VLIEGER

DESIGNATED FEDERAL OFFICIAL:

CARRIE RHOADS

C-O-N-T-E-N-T-S

	Page
1. Call to Order, Introductions, and Logistics Carrie Rhoads Designated Federal Officer	5
2. Review of Charge to Subcommittee Laura Welch Chair	10
3. Review of Items on Subcommittee Website for Review Carrie Rhoads Designated Federal Officer	8
4. Define the Issues and Scope of the Subcommittee's Topic Area	13
4a. Should We Expand our Discussion to Cover Exposure Assessment for Claimants? Laura Welch Chair	13
4b. Procedure Manual Lays Out What Items Can/Should Be Used to Assess Exposure Laura Welch Chair	21
5. How will our Subcommittee Interact or Overlap with the Subcommittee Assessing the Role of IHS? Laura Welch Chair	22
4c. Would Development of Presumptions for Frequent Conditions Fall Under Charge of our Committee? Laurie Welch Chair	36, 81

- | | | |
|-----|---|----|
| 6. | Should we Develop a Plan for Improving
the OHQ?
Laurie Welch
Chair | 43 |
| 7. | The 1995 Memo
Steven Markowitz
Member | 54 |
| 8. | How Do We Follow Up on the IOM Report
Laura Welch
Chair | 60 |
| 9. | Define Data and Information Needs
Laura Welch
Chair | 83 |
| 10. | Timeline
Laura Welch
Chair | 94 |

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

2 1:05 p.m.

3 MS. RHOADS: Good morning, everybody.

4 My name is Carrie Rhoads, and I would like to
5 welcome you to today's teleconference meeting of
6 the Department of Labor's Advisory Board on Toxic
7 Substances and Worker Health, the Subcommittee on
8 the Site Exposure Matrices, or SEM. I'm the
9 Board's Designated Federal Officer, or DFO, for
10 today's meeting.

11 First, we do appreciate the time and
12 the work of our Board members in preparing for
13 this meeting and for giving us their time today.

14 I will do a short roll call just to
15 make sure that everyone is on the line.

16 Dr. Laura Welch is the Chair. Are you
17 on the line?

18 CHAIR WELCH: Yes.

19 MS. RHOADS: Okay. And Dr. John
20 Dement?

21 DR. DEMENT: Here.

22 MS. RHOADS: Mr. Garry Whitley?

1 MEMBER WHITLEY: Present.

2 MS. RHOADS: Mr. Kirk Domina?

3 MEMBER DOMINA: Yes, here.

4 MS. RHOADS: Mr. Mark Griffon?

5 MEMBER GRIFFON: Here.

6 MS. RHOADS: And Dr. Steven Markowitz?

7 MEMBER MARKOWITZ: Here.

8 MS. RHOADS: Ms. Faye Vlieger is also
9 a member of the Advisory Board. She is also on
10 the line.

11 MEMBER VLIEGER: Yes. Thank you.

12 MS. RHOADS: Great. We are scheduled
13 to meet from 1:00 to 3:00 p.m. Eastern time
14 today. Since this is only a two-hour meeting, we
15 are not planning on taking any breaks.

16 Copies of all the meeting materials
17 and any written public comments are or will be
18 available on the Board's website under the
19 heading "Meetings" and the listing there for this
20 Subcommittee meeting. The documents will also be
21 up on the WebEx screen, so everyone can follow
22 along with the discussion.

1 The Board's website can be found at
2 dol.gov/owcp/energy/regs/compliance/advisoryboard.
3 d.htm. Or you can simply Google "Advisory Board
4 on Toxic Substances and Worker Health," and it
5 will likely be the first link that you see.

6 If you haven't already visited the
7 Board's website, I encourage you to do so. After
8 clicking on today's meeting, you will see a page
9 dedicated entirely to today's meeting. The web
10 page contains publicly-available material
11 submitted to us in advance of the meeting. And I
12 know these were posted a little late. Apologies
13 for that. The agenda is probably up there or
14 will be soon. And we will publish any materials
15 that are provided to the Subcommittee on that
16 website.

17 If you are participating remotely and
18 you are having a problem, please email us at
19 energyadvisoryboard@dol.gov.

20 If you are joining by WebEx, please
21 note that the session is for viewing only and
22 will not be interactive. The phones will also be

1 muted for non-Advisory Board members.

2 Please note that we do not have a
3 scheduled public comment session today. The
4 call-in information has been posted on the
5 Advisory Board's website. So, the public can
6 listen-in, but not participate in the
7 Subcommittee's discussion.

8 I have been asked about meeting
9 minutes and transcripts. The Advisory Board
10 voted at its April 26th to 28th meeting that
11 Subcommittee meetings should be open to the
12 public. A transcript of the meeting will be
13 prepared from today's meeting. During the Board
14 discussions today, as we are on a teleconference
15 line, I would just like to remind everybody to
16 please speak clearly enough for the transcriber
17 to understand, and when you begin speaking,
18 especially at the start of the meeting, please
19 state your name, so that we can get an accurate
20 record of the discussion.

21 Also, I would like to ask the
22 transcriber to please let us know if you are

1 having an issue with hearing anyone or with the
2 recording.

3 As the authority that minutes are
4 prepared and enter the certified WebEx share, the
5 minutes of today's meeting will be available on
6 the Board's website no later than 90 days from
7 today, per FACA regulations. If they are
8 available sooner, they will be published before
9 the 90th day.

10 Although formal minutes will be
11 prepared, we will also be publishing verbatim
12 transcripts, which are, obviously, more detailed
13 in nature. Those transcripts should be available
14 on the Board's website within 30 days.

15 I would like to remind the Advisory
16 Board members that there are some materials that
17 have been provided to you in your capacity as
18 special government employees and members of the
19 Board which are not for public disclosure and
20 cannot be shared or discussed publicly, including
21 in this meeting. Please be aware of this as we
22 continue the meeting today.

1 And with that, I convene this meeting
2 of the Advisory Board on Toxic Substances and
3 Worker Health, Subcommittee on the SEM. I will
4 now turn it over to Dr. Welch, the Chair of this
5 Subcommittee.

6 CHAIR WELCH: Thank you, Carrie, and
7 thanks, everybody, for being here.

8 Carrie and I discussed what materials
9 we might want to use for this introductory
10 meeting, and she had sent those in an email. And
11 now, I do see that they are also available on our
12 Subcommittee page.

13 What I wanted to do initially is go
14 over the charge to the Subcommittee, which in the
15 materials that we had before our first Advisory
16 Board was to advise DOL on the SEM. So, it is a
17 very broad statement.

18 And then, I wanted to review the memo
19 -- DOL made a presentation and they have a
20 written documentation of specific requests from
21 them. And I think that one of the big questions
22 I wanted get resolved with all of us today is

1 what we think our scope of work consists of, and
2 I have some suggestions about that.

3 So, just by way of background, we
4 heard at the Advisory Board meeting that the
5 Institute of Medicine had already done a review
6 of the SEM, and that document is available to all
7 of us. It originally was provided to the overall
8 Committee and it is on our website.

9 And that does lay out a lot of
10 recommendations for the Department of Labor, one
11 of which was to establish an expert Advisory
12 Board for the SEM. The Department of Labor
13 didn't tell us explicitly that that is the charge
14 to the Subcommittee or to the overall Board, but
15 the IOM report did say that the law permitted and
16 recommended the establishment of this Board. So,
17 I think it is reasonable to presume that one of
18 the recommendations from the IOM was the DOL
19 responded to that by establishing the Board.

20 What DOL has asked us to do, there
21 were four specific points on policy guidance, on
22 links between exposure and disease.

1 And, Carrie, this is down on page 9,
2 if you can provide that document all the way down
3 to page 9, the one you have open on the WebEx.
4 There we go.

5 So, let's see. Yes, so, then,
6 starting at the top, they are not specifically
7 itemized, but we want the Committee to provide
8 the DEEOIC policy guidance on linkages between
9 toxins and occupational disease.

10 And then, there are the specific
11 diseases for which they want guidance about
12 causation, including whether the ones that are
13 listed at the very bottom, and there's some on
14 the next page as well, but don't move to that
15 yet. These conditions somehow affect the
16 exposure response/linkage.

17 Then, the third point was how we
18 modify the SEM to better convey information and
19 how to help DOL set up priorities for their
20 contractors and adding new data to the SEM.

21 Now the IOM already made some -- I
22 think they are good recommendations for that

1 third point, modification of the SEM to better
2 convey information. And in their report, they
3 did a pretty good job, in my opinion, they did a
4 nice job of laying out for us what work needs
5 doing.

6 So that my overview introduction is
7 that our overall charge is to advise DOL on the
8 SEM. And then, DOL asked us some very specific
9 questions that go very quickly down to policy
10 guidance on specific diseases.

11 So, Carrie, could you back to my
12 agenda for the call?

13 I thought, on my point No. 4 here, I
14 thought it was helpful for us to talk among
15 ourselves and, then, clarify with DOL if we need
16 to the issues and scope of the Subcommittee's
17 topic area. And if this is what we get done
18 today, that is perfect, but there are other
19 things on the agenda.

20 We are supposed to focus on SEM, but
21 we haven't been asked to assess the entire
22 process by which DOL assesses exposure for the

1 claimants. IOM, and I know I, for one, on our
2 Committee, sees there are holes in the way that
3 the causation analysis can be done if you only
4 use SEM. But I guess, can we on our own say,
5 well, we want to see -- say, for example, it is
6 the Occupational History Questionnaire; it can be
7 in its own right a way to demonstrate causation
8 based on things that are reported there,
9 exposures reported there, or TACs, for example,
10 that may not be part of the SEM. Or do we need
11 to make sure we are focusing on the SEM? There
12 may be a way to do both. And I think I would
13 really like to take some discussion to get
14 thoughts about that. And then, we will get to
15 the "b" and "c".

16 Do people on the Committee think that
17 we should call ourselves, instead of the SEM
18 Subcommittee, the Exposure Assessment
19 Subcommittee? Any thoughts on that?

20 DR. DEMENT: This is John Dement,
21 Laurie.

22 I think we have to look at the

1 totality of the information that goes into the
2 exposure assessment. So, I would say that we
3 ought to be the Exposure Assessment Committee
4 encompassing the occupational history process,
5 including the form itself, but also the process
6 of obtaining that history and how that history is
7 used in connection with the SEM for exposure
8 assessment and what holes are there.

9 CHAIR WELCH: Do other Board members
10 have a thought about that, about John's? I think
11 John expressed what I was trying to, except very
12 clearly. Do other people agree or disagree with
13 that approach?

14 MEMBER WHITLEY: Garry Whitley here.

15 I believe I agree 100 percent because
16 the SEM database is so large and so incomplete
17 that we have to be that Committee and look at
18 other things out of the database.

19 MEMBER MARKOWITZ: This is Steven
20 Markowitz.

21 Actually, you know, the SEM includes
22 not just exposure, but the links to diseases by

1 encompassing this Haz-Map database. And in the
2 IOM report, which I know we will discuss later in
3 the agenda, they take aim not just at SEM, but,
4 in fact, as much as the Haz-Map database, at SEM
5 and SEM's use of the Haz-Map.

6 So, you know, one could argue that,
7 even beyond exposure assessment, that this issue
8 really involves the linkages to diseases. I am
9 not saying that that should be a primary goal,
10 but I think it was to be part of the discussion.
11 Because if we draw the limit at exposure
12 assessment, then we will be missing a major
13 piece.

14 And finally, I will say that,
15 actually, DOL in their list of requests that
16 Laura just reviewed, the No. 1 request was taking
17 20-odd diseases, including Parkinson's disease,
18 prostate cancer, et cetera, and asking for our
19 help on diagnostic criteria, but, also, what does
20 it mean; what does the literature show in terms
21 of causation, contribution, or aggravation? So,
22 I think DOL sees this issue as broader than just

1 exposure assessment.

2 CHAIR WELCH: Okay. No, I think you
3 are right, Steve. I didn't mean to say we were
4 going to forget about the exposure disease links.
5 I just thought if we are constrained to using SEM
6 as a way to assess exposure, it would become
7 complicated. It is not impossible, but it may be
8 that exposure -- and IOM did point out that
9 complex mixtures are not dealt well with in SEM.
10 So, if they are complex mixtures that are
11 suggested by occupational history, maybe you can
12 use data on that without having to force it into
13 the SEM model, that we could get there.

14 But, no, I totally agree it is very
15 important to look at IOM's recommendations and
16 see if we have others to add or how we would
17 implement what they recommended on that
18 disease/exposure link. Clearly, that is what the
19 SEM is there for, and they are finding many ways
20 in which they think it is falling short.

21 MEMBER DOMINA: This is Kirk. I have
22 a couple of questions.

1 During our meeting in April in D.C. I
2 asked specifically -- well, Rachel brought it up
3 that there are two different SEMs, one that the
4 public gets to look at and the one that DOL uses.
5 And so, to me, not knowing what that gap is, and
6 not having access to it because she said that she
7 would check in to find out if we could have
8 access to it, and we are -- what? -- two-and-a-
9 half months later and I haven't heard anything.
10 So, that concerns me a little bit because, you
11 know, it could be little; it could be large.

12 For somebody out of the claimant side
13 saying that you weren't exposed to chemical X
14 because it doesn't show up on the SEM, what SEM
15 are they talking about?

16 And I agree with everything else that
17 was said before this, but there needs to be
18 something done. And then, also, if not, then get
19 us clearances so we can access it. Because we
20 know NIOSH has seen a lot of stuff, and there are
21 DOE sites that have Special Exposure Cohorts that
22 also don't have any SEMs. And so, that is

1 another concern.

2 So, you take some of these other sites
3 that may be smaller that don't have a SEM. It
4 makes it that much harder for the claimant to try
5 to get their claim through.

6 CHAIR WELCH: Well, that is a very
7 good point which I didn't know about, that there
8 are sites without SEMs.

9 In the IOM report they do discuss the
10 fact that there are two different databases. And
11 possibly in the memo that we got from DOL, the
12 one that claims examiners use has fewer specific
13 toxins than the one that is publicly-available.
14 And DOL was saying that is because they are
15 trying to consolidate across brand names that may
16 be the same toxic exposure.

17 But I agree with you. I mean, we
18 definitely need an answer to that question.

19 Carrie, do you remember if that ended
20 up on the items to-do list?

21 MS. RHOADS: Yes, I think it did, and
22 they have been talking about it. I will have to

1 make sure that I get a final answer on that
2 probably this week.

3 CHAIR WELCH: Okay. And along those
4 lines, we had asked for some general claims data,
5 which we haven't gotten yet, either. I mean, one
6 of my thoughts was, if a very high proportion of
7 current claims are for specific medical
8 conditions, we want to make sure that we have
9 those tightened up, so that claimants can have,
10 whether it is by presumption or whether it is by
11 improving the SEM, so that the whole process can
12 work smoother for a big number of the claims.
13 But we have not gotten yet disease-specific claim
14 data.

15 And I know you asked them for that,
16 Carrie, to see if you could get it in advance of
17 this meeting, but do you have any idea on the
18 timeframe for getting that info?

19 MS. RHOADS: We have already asked
20 them for it. They are working on it. And there
21 are a number of outstanding ones that I will
22 follow up on and see how much longer it will be.

1 CHAIR WELCH: Okay. Good.

2 MS. RHOADS: But I know they are
3 working on them.

4 CHAIR WELCH: Okay. The point b I had
5 here under 4, the Procedure Manual lays out what
6 items can/should be used to assess exposure.
7 Unless there is some circular that overrides
8 that, it pretty much says the claims examiner can
9 use other information. They can use the exposure
10 information from a worker program questionnaire,
11 for example.

12 If the SEM does not show a specific
13 exposure, but they have information someplace
14 else, they are allowed to accept that other
15 source. It does seem that what we hear from
16 authorized representatives and workers is that
17 the claims examiners seem to rely on the SEM. If
18 it is not there, other sources aren't really
19 showing up.

20 But that is something that I think we
21 should reinforce from our Committee, that the way
22 the Procedure Manual lays out with other options

1 and that the SEM may be incomplete, and something
2 else may be probative, we should at some point
3 reinforce that.

4 DR. DEMENT: Laurie, this is John.

5 One of the things that I noted during
6 our discussion at the last complete Board meeting
7 was the example that we reviewed was a COPD case,
8 and the individual had worked at a number of
9 sites. Probably the only thing, at least in the
10 information that we were given that was used from
11 the actual history completed by the worker was
12 the occupation and site and the timeframe.

13 And then, the SEM information was used
14 almost exclusively, it appeared to me, for the
15 referral to the IH for the exposure assessment.
16 And it is really circular. I will look back at
17 the IH exposure assessment; the only thing that
18 comes under the Haz-Map are three different
19 exposures for COPD, and one is a biologic agent
20 and the other two are diesel and it is cement
21 dust. And so, the assessment by the IH was
22 completely based on information that came out of

1 the SEM and not related at all, except for
2 occupation and site, from the history. To me,
3 there is a major disjoint in that whole process
4 if this is a good example of how it is
5 essentially being used.

6 CHAIR WELCH: Yes, and, John, I agree
7 with you. I mean, I think you pointed that out
8 at the meeting. I have seen that from the claims
9 that I have reviewed, too, that the other sources
10 either aren't even mentioned in the file or the
11 SEM seemed to be more important. If there was an
12 exposure reported by the worker that wasn't in
13 the SEM, it was not considered probative. I
14 mean, it is just definitely something we have to
15 keep in mind along the way.

16 We are probably going to have to have
17 some conversation with the committee that is
18 reviewing the IH role because that is very
19 important.

20 MEMBER MARKOWITZ: This is Steve
21 Markowitz.

22 It sounds like where we might be

1 heading is, if we at some point look at a number
2 of claims to see how things actually work, that
3 we would want to identify -- and maybe this is
4 just repeating what you are saying -- but
5 identify the various pieces that are used to
6 construct the exposure and, then, the role of the
7 various personnel in using and interpreting that
8 information from the start to the end.

9 CHAIR WELCH: Right. That's good.

10 DR. DEMENT: I agree with Steve. This
11 is John. I agree with Steve. I think, again, as
12 we did with the last committee that we discussed,
13 I think we do need to look at the totality of the
14 process.

15 The example of the COPD case I think
16 is one. I think we need others to take a look at
17 pretty much the algorithm, if you will, that is
18 used to come up with determination of causality
19 or not.

20 CHAIR WELCH: And when John and I were
21 both on the Committee related to the Part B lung
22 disease, then we did request that DOL pull out

1 specific cases for us to review, and I do think
2 that would be helpful. It may be a little bit
3 harder to figure out what they are, I mean what
4 cases they are, although it could be the last,
5 you know, 50 that went to the IH for review. It
6 sounds like they are all, that a lot of them are
7 going to NIH for review. And that is something
8 really obvious to the claims examiner. That may
9 be the best way to get a sense of how the inputs
10 are being used.

11 DR. DEMENT: I know we are driven by
12 some questions about specific diseases, Laurie,
13 that are on that list, and I think those are
14 important. But it seems like the work of our
15 Committee also ought to be driven by the some of
16 the most frequent ones that are being processed
17 and whether or not they are accepted or denied.

18 The Part B Committee looked at some
19 data from the claims process. It came in an
20 Excel spreadsheet. I don't think it represented
21 the Part E claims very well; at least what we had
22 I don't think does.

1 So, the question to me is whether or
2 not we really want to look at some of that data
3 early on to try to direct us on where we might
4 get the most bang for the buck.

5 CHAIR WELCH: Yes, you know, I think
6 we do. I think we do, both because it would be
7 most helpful -- I mean, during the course of the
8 meeting, I think that Rachel Leiton had said to
9 me just in a side conversation that a lot of the
10 claims they are getting are for COPD. I can see
11 ways in which their process is going to continue
12 to fail for COPD and make it very time-consuming,
13 even if people do eventually get their claim
14 accepted.

15 I think very concretely, if we were to
16 try to fix something related to these common
17 diagnoses, if we understood the process and the
18 inputs, we would end up probably improving the
19 process for all the claims.

20 But we did ask for it. I mean, what
21 we asked for was a breakdown by ICD code of the
22 claims, of applications and accepting and

1 denials, which should be similar to the
2 spreadsheet that we saw for beryllium. It has
3 just got a lot more ICD-9 codes in it. But if
4 they were able to produce that for beryllium, I
5 am confident they could product it for us, which
6 has got thousands and thousands of claims.

7 DR. DEMENT: That is just computer
8 work.

9 CHAIR WELCH: Exactly. It is just
10 John's computer work. I want to tell the rest of
11 the Committee he did a beautiful job on doing
12 something with that Excel spreadsheet with
13 beryllium cases.

14 So, yes, I thought that we would kind
15 of get our charge together, but we might not be
16 able to do -- well, there is probably a lot we
17 could do, but I would really, really like to see,
18 and I am sure the whole Committee would like to
19 see some statistics on the kind of claims that
20 are coming in and, also, how many of those have
21 been approved or denied.

22 I think No. 5 was already discussed,

1 No. 5, on how will our Subcommittee
2 interact/overlap with the Subcommittee assessment
3 role of IH. I mean, once we do what Steven
4 suggested, look at reviewing all the inputs, who
5 reviews it, how they use it, all through the
6 process, that certainly would overlap with the
7 other Subcommittee. But that is fine because we
8 may approach it from one point of view and they
9 may approach it from a different one. I don't
10 think it is inefficient.

11 Does anybody have any thoughts on
12 that? Otherwise, I will just keep going.

13 DR. DEMENT: My thought is to get
14 pretty much the database on the claims in
15 totality, Laura.

16 CHAIR WELCH: Yes.

17 DR. DEMENT: And then, based on that,
18 we can look at the frequency of acceptance and of
19 denial based on some of these ICD codes. And
20 then, I think we ought to pull some kind of
21 stratified sample of the ones that are by some of
22 the major categories and take a look at them in

1 more detail.

2 CHAIR WELCH: Yes.

3 MEMBER MARKOWITZ: It is Steve
4 Markowitz.

5 We should also look at some of the
6 less common diseases or outcomes that people make
7 claims for. I am sure you didn't mean that we
8 are only going to look at the most common, but
9 some of the less common may be looked at
10 differently in the process. We just want to make
11 sure we don't entirely bypass them.

12 DR. DEMENT: Yes, I agree, and the
13 list that they gave us, some of them are fairly
14 common, but with low-probability of occupational
15 linkage on some of them. And some of the more
16 rare ones may have even a greater probability of
17 occupational linkage, if we look closely at the
18 literature.

19 CHAIR WELCH: Yes. So, when we get a
20 database back, we can look at some or even all of
21 the ones on their short list. I mean, we can get
22 a sense of, when they said the ones that are

1 associated with aging, dementia, and Parkinson's
2 disease, you could see this whole population as
3 aging. People are developing more of those
4 conditions. And then, it is important to have
5 DOL define how you could determine in any
6 individual case whether it is work-related.

7 So, once we get the overall claims
8 analysis by ICD code, we can -- John suggested a
9 stratified sample to look at some illustrative
10 cases with more detail on there around common
11 diagnoses, but also be sure to include definitely
12 some on their list, if not all the ones on their
13 list which they specifically asked for our
14 assistance.

15 MEMBER MARKOWITZ: Steve Markowitz.

16 I just want to look at the timetable
17 a little bit in reference to this idea about
18 looking at certain claims and when it might
19 happen. We are waiting for DOL to produce some
20 database, some information about what different
21 diagnoses are, occurred within claims, the
22 frequency.

1 We meet October 19th, or something
2 like that, 18th, 19th, so roughly two months,
3 three months from now. Are we hoping, is this
4 Subcommittee, as a Subcommittee, are we hoping
5 to, once we get the next round of information
6 from DOL, hopefully, within a few weeks, we are
7 hoping to request a certain number of de-
8 identified claims to look at before the next full
9 Board meeting, so we have a better understanding?
10 I just want to see where we are heading. That's
11 all.

12 CHAIR WELCH: That would be my hope,
13 yes.

14 MEMBER MARKOWITZ: Okay.

15 CHAIR WELCH: And so, it is really
16 more how do we get DOL to move on that request.
17 I mean, there are probably a lot of requests that
18 went in, I mean action items, some of which are
19 less important than this, in my opinion. Maybe
20 there is some way to move this request up higher.

21 But, yes, what we could do -- and we
22 do have the timeline down there -- we could

1 decide we are going to schedule another
2 conference call, say, a month before the October
3 meeting, with the idea that, prior to that, we
4 would have been able to look at the database.
5 And Carrie and I, maybe by email, we can decide
6 which claims we want to look at, get a chance to
7 look at them, and have at least some time to
8 discuss at the end of September.

9 MEMBER MARKOWITZ: This is Steve
10 Markowitz. I mean, I'm just there, Laurie.

11 CHAIR WELCH: Yes.

12 MEMBER MARKOWITZ: If we have a call,
13 this Subcommittee has a call September 20th and
14 hasn't looked at claims, we know it is going to
15 take them a while to prepare 50 claims, or
16 whatever number we want, de-identify and prepare
17 them. I am just wondering, I know we are held up
18 right now because we don't have the database we
19 need to sort of look at, but we, nonetheless, I
20 think need a plan.

21 Ideally, we would look at those claims
22 before we talk again towards the end of

1 September. That is, I guess, my point.

2 CHAIR WELCH: Yes, that was my
3 thought, too.

4 MEMBER MARKOWITZ: Okay.

5 CHAIR WELCH: It would be great if we
6 had the database today and we could all choose
7 what we want to look at, or at least discuss it
8 and email Carrie what we want to look at.

9 Now we are kind of imagining what the
10 database might show us when it comes to
11 diagnoses. In abstract, we could say we want to
12 look at so many files of the top three diagnoses
13 and so many files of their shorter list. That is
14 one way to approach it, so that we don't need two
15 calls. You could leave it up to me to choose
16 some once we get the spreadsheet and, then, we
17 would have our call in September and people would
18 then say, "Well, these are useful, but we are
19 going to need more. I mean, there is something I
20 really wanted to see." I think that might work.

21 Or we could get the data. Carrie
22 would send it out to everyone, and people could,

1 then, respond to her with their requests of what
2 files they would like to review. So, there are a
3 couple of options.

4 But I agree, whether it will get done
5 in that timeframe, but we would give DOL -- I
6 will say we would get it from DOL in three weeks
7 and, then, we could request cases.

8 Steven, do you think we want to try to
9 have a conference call to discuss the large
10 dataset? I was feeling like we can't quite get
11 that scheduled; we can't have two calls before
12 the October meeting.

13 MEMBER MARKOWITZ: Probably not. I
14 mean, it requires six weeks' lead time, right,
15 the Federal Register notice? So, probably not.

16 But I think, once Carrie finds out the
17 timetable for getting the first round, either
18 plan you suggest, either you selecting or people
19 write in with their requests, then we can
20 formulate the request for claims. And hopefully,
21 that won't take all that long for them to produce
22 the claims, that we could have looked at

1 something by the end of September for a useful
2 discussion.

3 CHAIR WELCH: Yes. I'm happy to take
4 responsibility for selecting some claims. But,
5 if people would like to see the spreadsheet and
6 comment on that as well, that's fine.

7 What does the rest of the Committee
8 think? Once we get a spreadsheet with data by
9 ICD code, would everyone like to see it?

10 MEMBER VLIENER: I think it would be
11 helpful if we all got to look at it.

12 This is Faye.

13 CHAIR WELCH: Okay. And then, Carrie
14 and I will formulate some questions and a process
15 by which you would send back requests for files
16 to review.

17 So, I guess the most important thing
18 for there is for Carrie to figure out how to
19 pressure DOL to get us the specific, you know,
20 the ICD code specific data analysis of the
21 claims. And it can look just like that nice
22 beryllium spreadsheet. We just need all the

1 diagnoses.

2 MEMBER MARKOWITZ: Yes, this is Steve
3 Markowitz.

4 I will help Carrie with it.

5 CHAIR WELCH: Okay. Great. Thank
6 you. Okay. So, that's a plan.

7 And then, also, Carrie and I can send
8 out or Carrie can send out an email asking for
9 dates, maybe the third week in September, so we
10 can have another call.

11 So, for my agenda item No. 6, I
12 think --

13 MEMBER MARKOWITZ: Laura, Laura, this
14 is Steve Markowitz.

15 CHAIR WELCH: Yes, go ahead.

16 MEMBER MARKOWITZ: I just didn't want
17 to skip over 4c --

18 CHAIR WELCH: Okay.

19 MEMBER MARKOWITZ: -- which, for
20 people who aren't looking at it, it says, raises
21 the question of, having looked at the DOE data
22 for how frequently what diseases people submit

1 claims for, would developing presumptions for
2 frequent conditions fall under this Committee?

3 So, I just wanted to --

4 CHAIR WELCH: Yes, thank you for doing
5 that.

6 MEMBER MARKOWITZ: Yes.

7 CHAIR WELCH: You know, the DOL staff
8 said they would like our help, would like the
9 Board's help with developing presumptions. So,
10 my view is, since we were asked, we could take
11 that on.

12 Steven, do you have a thought about
13 that?

14 MEMBER MARKOWITZ: Yes. Steve
15 Markowitz. Absolutely. You know, they have
16 moved somewhat towards presumptions based on
17 their own experience and difficulty in trying to
18 nail down the specifics about exposure and
19 diseases. I think that says a lot about what the
20 program has needed, and "program" meaning
21 administration of the program. The reality of
22 that, plus SEMs specifically asking us about

1 input into presumptions, and presumptions involve
2 exposure and disease linkages. So, that really
3 is something we should move ahead on.

4 CHAIR WELCH: I did not attach it as
5 our documents, but they did recently develop a
6 presumption on COPD, which I can make sure
7 everybody gets a chance to see. And they had
8 previously developed one on the specifics related
9 to ZEEP I think. So, there aren't a lot that I'm
10 aware of, but I will make sure that those go out
11 to the Committee.

12 MEMBER GRIFFON: Laurie, this is Mark
13 Griffon.

14 I agree with, basically, everything
15 you have been saying and the idea of looking at a
16 stratified sample. I was curious. I mean, I
17 don't want to make this more difficult
18 necessarily. But, similar to what we did on the
19 Radiation Board, we did a stratified sample. We
20 based it more than on just the ZEEP, though. We
21 did stratify based on site.

22 This is a different animal, but I

1 think it might be useful to stratify it on site
2 at least. We had several other factors that we
3 stratified, but that was different because we
4 also had more data for the radiation side.

5 And then, the only other comment I
6 have was, maybe I missed it, but what is our goal
7 in reviewing these, once we get a sampling of
8 cases to review? Are we going to review all
9 these cases individually and go through them one
10 by one and have findings if we disagree with the
11 way the claim was processed or are we doing this
12 to get a sense of how the overall procedure and
13 how, in general, they are processing claims? Or
14 what is our goal at the end of this?

15 CHAIR WELCH: That is an important
16 point for discussion.

17 MEMBER GRIFFON: Sorry, I thought I
18 missed it maybe.

19 CHAIR WELCH: No, no, no. I was
20 presuming something already without expressing
21 it, which was I was thinking the latter, that we
22 need to understand how the claims process works

1 and what is going into the assessment of the
2 individual exposure and, then, the
3 exposure/causation link.

4 MEMBER GRIFFON: I agree with that, by
5 the way. I think this will allow us to
6 understand it better. And maybe, then, we will
7 decide to go in another direction, but that is a
8 first step. I think I agree with that.

9 CHAIR WELCH: Yes, and I would suggest
10 that we all look at the same cases rather than
11 doing more cases and dividing them up and
12 reporting back to each other. Because, anyway, I
13 think it would be easier to have the conversation
14 if we all looked at 20 cases, five of us each
15 look at 20 and present to the group, if we are
16 looking at the same cases to start with, even
17 though it will be maybe less representative,
18 because different cases may show us a different
19 part of the process. But I can't think of a more
20 efficient way to understand it.

21 MEMBER GRIFFON: I totally agree with
22 that. I think, depending on if you just

1 stratified by disease, I just think we should try
2 to also select a representative number of the
3 large DOE sites because I think, well, you have
4 different claims assessors' office; you have
5 different exposure data available from the
6 different sites. So, they may look very
7 different, but a COPD case from Rocky Flats
8 versus Los Alamos may look very different, just
9 because of what they have available to work with,
10 or whatever. So, I think that would inform us a
11 little bit more on the exposure side as well.

12 CHAIR WELCH: Yes, I think that is a
13 really good point. I totally agree.

14 And Kirk pointed out that some of the
15 small sites don't have a SEM. So, at some point
16 we want to see how do they address those.

17 MEMBER GRIFFON: Yes.

18 MEMBER MARKOWITZ: Steve Markowitz.

19 One way is to have some of those
20 claims that we look at come from non-SEM sites.

21 CHAIR WELCH: Yes.

22 MEMBER GRIFFON: Yes.

1 MEMBER MARKOWITZ: But, I mean, I
2 would also just like to propose a second goal,
3 which is not just to understand the claims
4 process, but also to understand what data points
5 exist within these claims, that if later we move
6 to a more systematic look at what they are doing,
7 that we will understand how to structure the kind
8 of data we are after.

9 MEMBER GRIFFON: I agree, yes.

10 DR. DEMENT: This is John again.

11 I agree with Steve. And looking at
12 the small number of these occupational histories
13 that we have seen so far, many of them seem to me
14 to be very incomplete. I am wondering how much
15 these sites are supposed to be helping the worker
16 compare these, how much guidance they are
17 actually giving the worker with regard to
18 preparing these occupational histories.

19 MEMBER VLIENER: I can answer that
20 question. This is Faye.

21 DR. DEMENT: For example, the ones we
22 have seen so far, I have seen very little

1 information with regard to description of the
2 task that we actually did. As a hygienist, the
3 task and the material really dictate pretty much
4 what the exposure intensity would be anyway. At
5 least somehow I would like to learn more about
6 that process of collecting this history. Who
7 does it, how are they trained to help the worker,
8 and how they are trained to look at these when
9 they are done and critique it, see if it is
10 complete? That is just a piece missing for me.

11 MEMBER VLIEGER: This is Faye.

12 The Occupational History Questionnaire
13 is either completed by the worker or by the
14 worker in conjunction with the Resource Center.
15 The information that you would expect them to
16 know about their exposures does not exist. It
17 doesn't exist in the worker's employment records
18 and it doesn't exist with the U.S. Department of
19 Energy in their records.

20 And so, the worker does the
21 Occupational History Questionnaire to the best of
22 their ability. The only time I have seen a

1 detailed list of what someone was exposed to is
2 when they were one of the chemists or
3 metallurgists in the laboratory setting and they
4 knew what was on their lab bench, and they could
5 report what they used.

6 DR. DEMENT: I think that is a good
7 point. But what would help, for example, in an
8 occupational history would be provide some cues
9 to the worker with regard to tasks that are, for
10 example, known to increase the risk of intense
11 exposure.

12 In the Former Worker Programs, we try
13 to, one, use workers to collect the information,
14 to help the individual. The interviewers have
15 experienced personal or collecting occupational
16 histories now so many times a lot of experience
17 outside. And so, I think we stimulate some
18 better history, we call it, than I think we are
19 getting on these histories that I have seen so
20 far in the compensation program.

21 CHAIR WELCH: Yes, and that was the
22 item I had. I think we have kind of already

1 answered the question already about the item of
2 should we develop a plan for improving the
3 Occupational History Questionnaire. And I think
4 people have already said yes to that.

5 We have asked how it get administered,
6 and what Faye said is what we also heard at the
7 meeting, completed at the Resource Centers, but
8 there doesn't seem to be any training on history
9 interviewing. But part of the form is not
10 designed to ask about task or exposure. It is
11 designed to ask about where you worked.

12 DR. DEMENT: No, that's right, and ask
13 about incidents. But I don't see much in there
14 of asking about specific tasks. Although in the
15 SEM there are some specific tasks that are
16 listed, it is quite incomplete, based on my just
17 cursory review so far. But, even there, it would
18 be a linkage that would help the worker.

19 CHAIR WELCH: And along this line,
20 Trish Quinn, who is the coordinator of our med
21 Program, John Vance contacted her after the Board
22 meeting to ask if the Building Trades Program

1 could help improve the Occupational History
2 Questionnaire.

3 So, you must have impressed him, John,
4 with your comments.

5 DR. DEMENT: Yes, to make sure --

6 CHAIR WELCH: But the DOL would be
7 open to that. I think it is a pretty big task.

8 DR. DEMENT: It is. We help so many
9 different labor categories from production
10 through labor, our construction and non-
11 construction. It is a pretty daunting task to
12 have one history.

13 CHAIR WELCH: Yes. But I would think
14 that, at a minimum, we should make
15 recommendations to DOL, as our Committee looks
16 forward, of how to improve it, even if we are not
17 going to development it for them, because we
18 could have codified the discussions that we have
19 had about what needs to be in it and the best way
20 to obtain that information.

21 MEMBER MARKOWITZ: Steve Markowitz.

22 So, I get involved with the Former

1 Worker Program on the production side. And I
2 want to emphasize -- and Mark Griffon has been
3 involved as well -- I just want to emphasize how
4 many job titles we have at the various sites --

5 CHAIR WELCH: Yes.

6 MEMBER MARKOWITZ: -- and how they
7 have evolved over the decades.

8 I think it would be very ambitious to
9 get high-quality information from people's
10 memories about job task, that it would really
11 need to be a cadre of well-trained interviewers
12 who know these sites and know the kind of work
13 people have done in order to get that
14 information. And so, I would say no one is
15 underestimating that, but I just wanted to
16 emphasize how challenging that would be.

17 CHAIR WELCH: Right. Yes. No,
18 absolutely.

19 MEMBER WHITLEY: Garry Whitley here.

20 I think, first of all, the Resource
21 Center and the claims examiner, neither one
22 helped these people with even the SEM database.

1 They have to come back to the Worker Health
2 Program or to us and ask us, well, what chemicals
3 did a pipefitter or a sheet-metal worker work
4 with?

5 Even if we have got one of these in
6 the SEM database, neither one of those two groups
7 will help the people at all, the claimant at all,
8 with that SEM database. They don't pull it up
9 and say, "Well, see, here you worked for" so-and-
10 so. They don't do that, and they won't look
11 under the SEM. They will make a decision on your
12 case with the SEM, but they won't help you look
13 it up and say, "Well, did you work with this
14 chemical or did you not?"

15 I think, personally, the presumption
16 thing would be the best thing we could do to help
17 the claims examiners. Because I have got cases,
18 have seen cases where the claims examiners tell
19 people, "Well, if you're a sheet-metal worker,
20 you didn't work with anything." If you go to the
21 SEM database that we see and look at sheet-metal
22 worker, it is there that he worked with that

1 chemical every day.

2 So, I think the presumptions could
3 help with our claimants a lot better than maybe
4 some other ways we could help.

5 CHAIR WELCH: I think that is a good
6 point. I mean, when I think about COPD, I do
7 think that writing a process, you know,
8 distilling the literature and saying these kinds
9 of exposures are causative or contributory,
10 rather than trying to make it fit into the SEM
11 matrix, which would be difficult.

12 And then, as you point out, Garry --
13 I mean, and Steve has said the same thing in a
14 different way -- you really need an interviewer
15 who understands the site and the processes that
16 are used there to get the right information out
17 of the worker. The SEM doesn't really have it
18 all. But you are saying that, even when the SEM
19 has it, nobody really helps the worker bring it
20 forward. And someone needs to bring it forward
21 for him to put forward a good claim.

22 So, yes, presumptions would make

1 sense. We probably could link it. And again, if
2 when we see how many claims fall into the top ten
3 diagnoses, maybe it would be. It would certainly
4 make their workflow more efficient if there were
5 good presumptions.

6 The problem with presumptions, because
7 presumptions are supposed to be the easy ones,
8 and then, even if you don't meet the presumption,
9 your case can be adjudicated based on more
10 specific individual information. But you can
11 imagine how this system meet the presumption of
12 the yes/no.

13 MEMBER WHITLEY: Right.

14 CHAIR WELCH: And this kind of makes
15 you want to make the presumption a little more
16 inclusive, but, then, there is this balance of
17 when you start including cases that clearly
18 aren't related, but they might meet the
19 presumption.

20 So, it is hard, but it has been done
21 so many times. The trust funds that were set up
22 for asbestos claims have presumptions and a whole

1 process which people can demonstrate that, even
2 though they don't meet a presumption, they meet
3 the intentions of the trust. And you wouldn't be
4 reinventing the wheel on that if we made those
5 recommendations.

6 I hate to say it; we have covered our
7 agenda, probably because I am moving us all too
8 fast.

9 Now we have time to go back. Because
10 we have talked about the data information we have
11 requested already, that we want to review example
12 claims and challenging cases.

13 Oh, I guess, you know what? Let me go
14 back. The IOM report, I think I am happy to
15 summarize for people what is in the Executive
16 Summary, if people would find that helpful,
17 because I think they are questions that -- this
18 is the IOM rate or many of the same things that
19 DOL does.

20 But, again, before we do that, do
21 people have any other thoughts about the
22 Occupational Health Questionnaire? I think it is

1 what we said; we think it needs work. It is not
2 collecting all the information that the claimants
3 should be giving to the claims examiner. It is
4 pretty clear that the worker is not getting a lot
5 of help in filling it out. We haven't
6 necessarily made a plan to revise it.

7 MEMBER VLIEGER: This is Faye.

8 Regardless of what a worker puts on
9 OHQ, it is not considered probative. It is not
10 even considered many times in the decision at all
11 when they look for labor categories or they look
12 for exposures. The only information that the
13 Department of Labor considers valid is what they
14 pull from the SEM, and the SEM is incomplete for
15 labor categories and exposures.

16 So, what I think would be helpful when
17 we ask for the information from the Department of
18 Energy at the meeting was for them to say whether
19 or not they ever monitored for these things from
20 the workers and, if they didn't, then to say so,
21 because they know the employee, the worker, has
22 to say that they were exposed, has to prove they

1 were exposed with monitoring data.

2 CHAIR WELCH: Right, or the SEM. But,
3 actually, if it is that post-'95, it is supposed
4 to have monitoring data.

5 MEMBER VLIEGER: Right, and there's no
6 monitoring data. And so, it wasn't in the list
7 of things that I saw we were requesting. But I
8 found it in the transcript of the minutes where
9 Pat Worthington said she would be willing to look
10 for that information, but she needed to know
11 where to look first because, of course, they had
12 many sites.

13 CHAIR WELCH: And which information
14 was she going to look for? I didn't quite
15 understand.

16 MEMBER VLIEGER: She was going to tell
17 us whether there was monitoring data or not.

18 CHAIR WELCH: Oh, okay. I have always
19 presumed that, if there wasn't an OSHA or a DOE
20 standard that needed to be met, no one would be
21 monitoring the exposure.

22 MEMBER VLIEGER: Well, then, DOL comes

1 back to the worker and says, "There's no
2 monitoring data. Therefore, you weren't
3 exposed."

4 CHAIR WELCH: Right.

5 MEMBER MARKOWITZ: This is Steve
6 Markowitz.

7 Or they could take the monitoring data
8 and say, "We have monitoring data and you weren't
9 exposed." It cuts both ways, actually.

10 MEMBER VLIEGER: Well, no, where are
11 you going to find as many of the chemicals and
12 concerns for these workers we never monitored
13 for?

14 CHAIR WELCH: No, that makes a lot of
15 sense.

16 So, I think that that memo that says,
17 after 1995, DOL is going to presume that the work
18 places were all completely safe, is -- I don't; I
19 can't think of a good adjective. I disagree, and
20 they are making it up because they have no
21 monitoring data that shows that it is or isn't.
22 But I think we have to keep this on our agenda.

1 I don't know that -- right, that is not the first
2 thing we are going to address, but at some point
3 we need to address the fact that workers will
4 describe exposures and the SEM describes
5 exposures linked with those, and diseases linked
6 with those exposures and the timeframe for when
7 the exposures occurred.

8 If DOL would like help with timeframes
9 for exposures, then that would probably have to
10 go into a presumption with specific
11 disease/exposure relationships. And then, those
12 post-'95 thing could be addressed exposure by
13 exposure. But I don't know; I say let's defer
14 that for our next -- maybe after the big meeting,
15 because it would be pretty difficult to
16 demonstrate that they are wrong because the
17 monitoring data doesn't exist before or after
18 1995 for many of these standards.

19 MEMBER DOMINA: This is Kirk.

20 I need a comment on that. You know,
21 a lot of times, you know, just because they put
22 this in the 1995 -- you have got to look at where

1 the sites were at that point in time with whoever
2 the contractor was. Because if they are going to
3 come in the middle of the contract and say, "We
4 want you to start doing all this," and you don't
5 provide funding for it, they are going to ask for
6 requests for equitable adjustment. And if they
7 don't do that, they are not going to do it.

8 A prime example is Hanford's last SEC
9 from '84 to '90 for the building trades. There
10 is a reason that one went through, because they
11 were supposed to do bioassay sampling. They
12 provided no funding. So, I believe there was
13 like six bioassay samples for like 4400 workers.
14 And that is part of the reason that one went in.

15 And it is no different with this.
16 Like I look at these other sites that I talked
17 about earlier that have SECs with no SEM, so they
18 have got no rad data. You know they have no
19 chemical data. And that would be that way for a
20 lot of them.

21 I mean, I have been on here a long
22 time, just like Garry was out there a long time

1 at his site. They didn't monitor for things
2 because at that time it wasn't considered a
3 hazard or we were in a Cold War effort. You have
4 to look at all those things that come into play.

5 CHAIR WELCH: Right. No, that's
6 right.

7 Steven, do you want to give your
8 thoughts about when we can address that 1995
9 memo?

10 MEMBER MARKOWITZ: So, we are going to
11 need some background on this from DOL as to how
12 they arrived at that conclusion.

13 CHAIR WELCH: That's true.

14 MEMBER MARKOWITZ: And I think that
15 the presence or absence of monitoring data post-
16 '95 is not going to be determinative of the what
17 needs to be done. The post-'95, or post whatever
18 date you want, time moves on; maybe workers need
19 to describe from their more recent memory their
20 work tasks and the ways in which they may have
21 had exposure with or without monitoring. Even if
22 they show monitoring results at no levels or low

1 levels, we are not necessarily going to trust
2 that that represents the workers' exposure.

3 So, I think that it is part of
4 exposure assessment that we are talking about,
5 and I agree we are going to have to keep it on
6 the radar and find out more before we can really
7 kind of weigh-in here.

8 CHAIR WELCH: Okay.

9 MEMBER VLIEGER: I'm sorry, this is
10 Faye.

11 As part of DIAB and NLAB's work, we
12 queried Pat Worthington from DOE Headquarters and
13 Greg Lewis about where the information came for
14 the establishment of the post-1995 criteria. The
15 Department of Energy responded that they did not
16 provide Department of Labor any information that
17 these sites had no exposures after '95. I can
18 provide a copy of that to you all. But,
19 specifically, the Department of Energy did not
20 provide DOL any exposure information for the
21 post-1995 Toxic Exposure Circular.

22 CHAIR WELCH: Well, that is

1 interesting. Okay.

2 MEMBER MARKOWITZ: Yes. Steve
3 Markowitz. It would be interesting to see that
4 email, sure.

5 MEMBER VLIEGER: I mean, we did say,
6 "We at DOE are aware of the two circulars you
7 referenced, but we are not involved in the
8 policymaking process at DOL and we are in no
9 position to comment on how and why these two
10 decisions were made."

11 CHAIR WELCH: Well, they could have
12 provided information and they are not going to
13 tell us. So, we should probably get even more
14 specific, you know.

15 MEMBER VLIEGER: Well, you know, I can
16 send you this. I have very specific questions
17 that they answered. Basically, it was what
18 monitoring data are they saying it is from and
19 DOE basically said, "We didn't give them anything
20 specific. They are basing their decision off of
21 when orders were published to make workers safe,
22 not when workers were safe."

1 CHAIR WELCH: Okay. Well, that would
2 be great to see that.

3 MEMBER VLIEGER: Okay. I will send
4 it.

5 MEMBER MARKOWITZ: But this is Steve
6 Markowitz.

7 So, we are trying to figure out how to
8 improve exposure assessment here and how DOL can
9 better use whatever information becomes
10 available. Well, that is going to imply that our
11 recommendations on that are going to apply the
12 post-'95 exposures, just as they do to pre-'95
13 exposures. We are not going to make an arbitrary
14 distinction about that.

15 But I think as we make progress in
16 sharpening, helping to improve this process, that
17 will pertain to this pre/post-artificial
18 distinction of '95. Does that make sense?

19 CHAIR WELCH: Yes, it does to me,
20 absolutely.

21 MEMBER MARKOWITZ: Laurie, I would
22 like to go back to the IOM report.

1 CHAIR WELCH: Yes.

2 MEMBER MARKOWITZ: Oh, I'm sorry, you
3 said you were offering to summarize that for the
4 people on the phone.

5 CHAIR WELCH: Yes, I will, and it is
6 a very short summary at the moment, relatively-
7 long report.

8 So, the Department of Labor asked the
9 IOM specific questions, and they wanted them to
10 focus on the link between exposure and disease in
11 the SEM, which we know is derived from Haz-Map.
12 So that they were focusing on that part of the
13 SEM, not necessarily somewhat of how the data got
14 in there, but not really so much where the
15 exposure information came from, but really on the
16 exposure. They asked what tasks and toxins are
17 missing, and if there is other information that
18 could be used to inform that same process, the
19 exposure/disease link or other databases.

20 So, then, IOM noted -- the things I
21 have read reviewing the report, again, that I
22 thought were useful and worth repeating was that

1 the Haz-Map was not intended to be used for this
2 purpose; that the links in Haz-Map are strong,
3 but probably narrow; that for carcinogenicity
4 they used it to say, if a substance causes
5 cancer, it has to be an IARC Group 1 carcinogen,
6 but there is no clear criteria for non-cancer
7 outcomes, about what they establish.

8 It was based on textbooks and authors'
9 experience, and it tends to be well-established
10 links and established for causation and not for
11 contribution. They noted that this Haz-Map and
12 the SEM don't handle complex mixtures or
13 exposures well at all, and that Haz-Map is not
14 very systematic.

15 So, after that review, I only came up
16 with three big points, one of which was to
17 incorporate other information sources beyond
18 Haz-Map. And they recommended the ATSDR tox
19 profiles, data from EPA and IRIS, substance-
20 specific reports from the National Toxicology
21 Program, and some information specifically from
22 the California EPA. And they acknowledged it

1 would be difficult to get all that information in
2 there, but these are all expert-based reviews
3 that have also been through a peer review. But
4 it wouldn't be requiring DOL or the Advisory
5 Board to be continuously reviewing the medical
6 literature and deciding about causation if we
7 relied on other agencies to opine on causation
8 and level of risk, to some degree. Many of those
9 do, like IRIS or the NTP. But DOL would have to
10 establish some kind of process for having that
11 done.

12 The other main point was that the
13 functionality of SEM could be improved greatly,
14 and they made some very specific recommendations.
15 One point was that, if you want to look at, say,
16 a worker who worked at multiple sites, you have
17 to go to each one of those sites and look at the
18 data for each one of those sites; that there
19 would be ways to improve it.

20 They also pointed out, as far as they
21 could tell, there has never been any quality
22 assurance on the data entry into SEM, not a

1 review to make sure that what was on the source
2 documents is actually what was put into SEM. It
3 is recommended that should be done on an ongoing
4 basis.

5 And the third point was that they
6 should set up an expert advisory panel for SEM.
7 I said in the beginning I think that is us.
8 There were some specific points in that that I
9 can bring up pretty easily.

10 Sorry, I am just finding the right
11 page.

12 So, they said the expert advisory
13 panel would have immediate tasks which are:

14 Establish the criteria for the
15 evidence base for causal links. Criteria might
16 be expanded to include a category of evidence "no
17 association," such as the way IARC does.

18 Determine what information sources
19 might be relied upon.

20 Develop worksheet or documentation, so
21 that it is clear what data is going from the
22 source material into the SEM.

1 And then, oversee revision of SEM to
2 add appropriate fields such as chemical
3 interactions, rad exposure, supplemental
4 information sources.

5 And then, they said the expert
6 advisory panel would also have ongoing
7 responsibilities such as peer review of links in
8 SEM, assessment of occupational diseases that
9 result from complex exposures, identification of
10 potential new links, including those suggested by
11 external sources, and a periodic review of the
12 toxic substances/disease links for both accepted
13 and rejected claims to determine which SEM links
14 are actually assisting in the claims process and
15 what improvements should be made.

16 I think in the list we made we are
17 adjusting some of those right away, such as a
18 periodic review of sample of claims to see what
19 links are being used. We are not yet suggesting
20 a systemic review of all the causal links.

21 I think that the IOM report makes a
22 very good case for having these exposure links in

1 SEM be created by more than one person and that
2 there be a transparent process and expert review
3 of such links.

4 And I think we, as a Committee, have
5 to decide if -- I think one question is, why
6 didn't DOL do that yet? It appears as if we are
7 being asked to address the same questions or
8 maybe even bigger ones.

9 And this document I think was 1993.
10 Am I right? I mean, sorry, 2013. It was
11 published in 2013. So, the Committee met in
12 2012. It could be that the plan was to wait for
13 the Board to be constituted, which did take some
14 time.

15 But I also think, if there are parts
16 of these recommendations out of the Institute of
17 Medicine that DOL just flat out says we can't do,
18 we should know that before we recommend them
19 again. I mean, it doesn't mean we wouldn't
20 recommend them again, but the process of -- they
21 still have a contract with the physician who
22 developed Haz-Map, and I don't think that that

1 has tended to figure out how to incorporate from
2 these other data sources.

3 So, I am not sure of the process for
4 that. Maybe just at the next meeting we could
5 ask for them to make a presentation to the Board
6 about what they have implemented and have not
7 implemented from the IOM report.

8 MEMBER MARKOWITZ: This is Steve
9 Markowitz.

10 That's a good idea. I think we should
11 ask them what they have implemented, what they
12 haven't, and what's their thinking about this.

13 CHAIR WELCH: We could get that on our
14 next Subcommittee call. Do you think that would
15 be helpful? We can wait until the big meeting?
16 I guess we can wait because at our next
17 Subcommittee call we would sort of be focused on
18 understanding the inputs and throughputs for the
19 claims.

20 MEMBER MARKOWITZ: This is Steve
21 Markowitz again.

22 I would have to repeat it; it is a big

1 Committee meeting regardless.

2 But can I raise a different point on
3 this? I think I disagree with part of part of
4 your formulation about whether the current
5 Advisory Board constitutes what IOM describes as
6 needed.

7 CHAIR WELCH: Uh-hum.

8 MEMBER MARKOWITZ: The IOM called for
9 some very big tasks, like -- and this is really
10 just repeating what you said, Laurie -- peer
11 review all new links in SEM. So, anytime there
12 is enough information that a given disease is
13 caused by a chemical, that the expert advisory
14 panel, according to IOM, would actually do that
15 review of all that literature and weigh-in on
16 that link or that link would be done by Haz-Map
17 and, then, the expert panel would review that
18 work.

19 There are other things that they call
20 for. These are the ongoing responsibilities of
21 the expert advisory panel.

22 Even something, one of the immediate

1 tasks, establish the criteria for the evidence
2 base for causal links, let me describe what --
3 for cancer, that means the way that the World
4 Health Organization does that, the way that the
5 National Toxicology Program does that, is they
6 have criteria on how we are going to decide that
7 something causes cancer. How are we going to
8 look at human epidemiologic studies? How are we
9 going to look at animal studies? How are we
10 going to look at studies in the lab, mechanistic
11 studies, and weigh all that information in order
12 to make a decision? That is a well-worn path.
13 Even then, there is controversy, but at least it
14 is a well-worn path.

15 For non-cancer outcomes, there is, to
16 my knowledge, no generally-accepted approach.
17 And yet, the IOM report is calling for this
18 expert advisory panel potentially to do that for
19 non-cancer outcomes, which is way beyond, I
20 think, what our charge is.

21 So, I just want to point out that I
22 think that we need to be careful about what tasks

1 we think we can do from the IOM critique and,
2 otherwise, weigh-in on, if we believe it, how DOL
3 could address the broader path.

4 CHAIR WELCH: I totally agree with
5 you. This is Laurie. Yes.

6 And I think we should spend some time
7 talking about that. I do feel like if DOL says,
8 well, we couldn't do those immediate tasks
9 because it would be so time-consuming -- you
10 know, establish the criteria for the evidence
11 base, oversee revisions to SEM, all this stuff,
12 and peer review all the new links -- if they just
13 don't have the money to hire people to do that,
14 then I think we need to say, the Board needs to
15 say, either "Yes, you have to" or "Here's an
16 alternative that would be acceptable and better
17 than what we have," if we can come up with an
18 alternative that is not as work-intensive.

19 But I do think we need to find out why
20 they didn't implement them and, then, at some
21 point say this is an acceptable path or we agree
22 with this essential task and you have to do it.

1 And either the Board will do it or the Board will
2 hire someone else to do it.

3 Does that make sense to you, Steven,
4 in terms of what you were just saying? Because I
5 agree with you those are big tasks.

6 MEMBER MARKOWITZ: Well, yes. I mean,
7 we should decide what we can feasibly do and,
8 otherwise, recommend the plan that is going to
9 require resources for them to pursue it. Even if
10 you look at their request to us from the April
11 meeting, one of the documents, page 9 where they
12 list 20-odd outcomes, they say they, quote, "want
13 to know what toxins are at least as likely to
14 cause, contribute, or aggravate these diagnoses".
15 End of quote. And then, they list 20 conditions,
16 including breast cancer, neuropathy, diabetes,
17 heart disease, very broad conditions.

18 It, frankly, is kind of an immense set
19 of tasks. So, at the very least, we need to
20 describe how these tasks can be accomplished and
21 what resources are required, what the structure
22 should look like feasibly --

1 CHAIR WELCH: Yes.

2 MEMBER MARKOWITZ: -- not pie-in-the-
3 sky. I think IOM was a little pie-in-the-sky,
4 frankly, but feasibly that it can be done.

5 CHAIR WELCH: I agree. I agree with
6 you.

7 DR. DEMENT: This is John.

8 You know, we just didn't hear anything
9 from the DOL with regard to just a work plan for
10 addressing those comments. I think that is
11 really sort of the missing link right now.

12 Yes, I agree with Steve, a lot of the
13 IOM reports fall, while the recommendations are
14 good, they are a little bit impossible to
15 implement in a practical way without
16 extraordinary resources. So, I think we need a
17 little more direction maybe related to that. We
18 have to have a little more practicality.

19 MEMBER MARKOWITZ: Steve Markowitz
20 again.

21 I don't think we should wait until we
22 hear from them about what they have implemented

1 since then, since it is likely, looking at the
2 recommendations, likely they have implemented
3 very little. And so, we should assume that not a
4 whole lot has been done and proceed there as
5 opposed to waiting until October to hear, you
6 know, frankly, a modest set of things are likely
7 to have been accomplished.

8 CHAIR WELCH: Yes. Partly because of
9 the way I think about things, I feel like looking
10 at examples, looking at cases will help me with
11 this. The more the obscure the disease, the less
12 common the disease, the less likely there is data
13 to link it to exposure, but also the fewer claims
14 there are that would present with that disease.
15 And I feel like some of the process of helping
16 them develop a process to review very broadly all
17 disease/exposure links will end up being lost in
18 some of these very difficult decisions.

19 I mean, I think the same way about the
20 SEM. The SEM has already got 17,000 specific
21 toxins in it. And the contractor is out there
22 collecting more exposure information. It would

1 seem to me the exposure information they are
2 finding now would be rare exposures, short-term
3 exposures, things that may be hard to assess, and
4 that we would be better off trying to get the SEM
5 and the whole process to help with the claims
6 they are having a difficult time with that are
7 frequent. But that would mean that we are
8 leaving some workers hanging who have relatively-
9 rare diseases for which there is little exposure
10 information.

11 DR. DEMENT: This is John again.

12 Looking at that list that we were
13 provided with these conditions, a lot of them are
14 already pretty well addressed by IARC in most of
15 their reviews; for example, kidney cancer and
16 TCE, benzene, cadmium, asbestos. So, it has been
17 looked at. So, I don't quite get the reason for
18 it being on there. Also, the non-Hodgkin's
19 lymphoma and TCE and benzene, you know, they have
20 been looked at a lot with regard to IARC and
21 others. So, some of those can be referred to
22 existing reviews.

1 CHAIR WELCH: You're right, six of the
2 list are cancers.

3 DR. DEMENT: Yes, I don't quite see
4 why those are problematic.

5 CHAIR WELCH: If the criteria in
6 Haz-Map, if you were using Haz-Map, now the
7 cancers, I haven't memorized the list of cancers
8 that are considered radiation-related. Mark I
9 know would look at that list and say, yes, a
10 specific cancer, it isn't.

11 If what is on this list are the ones
12 that go to Part E because they are not radiation-
13 related --

14 DR. DEMENT: Oh, yes, these are Part
15 E.

16 CHAIR WELCH: Yes. So, they needed
17 some guidance to say benzene is known to cause
18 non-Hodgkin's lymphoma or not. That seems to be
19 what they're asking up there. But there are
20 existing reviews, absolutely.

21 MEMBER MARKOWITZ: Steve Markowitz.

22 My guess is that Haz-Map might be not

1 quite up-to-date on some of these cancers. So,
2 they, then, get questions.

3 DR. DEMENT: Yes, I agree, and that
4 was one of the IOM comments about Haz-Map as
5 well. The criteria for "causality," quote, is
6 quite, you know, pretty much it has to be in a
7 textbook, let's say, versus more contemporary
8 literature.

9 CHAIR WELCH: Yes, but I think I agree
10 with you, John, that it should be easy to say
11 that, I mean, if IARC has done a review and it is
12 now a Group 1 carcinogen, the link has been
13 established and it doesn't have to appear in a
14 textbook to get into SEM. But, again, I don't
15 know the process. I mean, we sort of know the
16 process. I think that probably that is
17 happening, but what kind of delay are we getting
18 between when there's some excellent review that
19 comes out and it gets into SEM.

20 MEMBER MARKOWITZ: Yes. Steve
21 Markowitz. The problem is people don't update
22 those textbooks fast enough, right? Yes.

1 CHAIR WELCH: Oh, yes.

2 DR. DEMENT: Most of the time, by the
3 time a textbook gets published, it is out of
4 date.

5 CHAIR WELCH: Yes, and if you are
6 using, you know, let's say you are using Selvin
7 and Krieger, which is every five years. Even if
8 you used three different textbooks, what is in a
9 textbook would be six years' out-of-date. By the
10 time the new edition comes out, it could be.

11 And I think that is what the IOM was
12 saying. If you have something like the National
13 Toxicology Program, there's no reason to wait
14 until somebody puts that into the textbook. If
15 you can pick other sources that can be considered
16 probative, but the DOL could accept their causal
17 links without additional review, you could add
18 things more quickly.

19 I can't really get my head around how
20 to approach those recommendations from IOM right
21 now, though. I haven't thought about it enough.
22 I have to listen to other people. You know, what

1 is the process for adding new data sources and
2 what is the process for peer-reviewing new links?
3 Is that necessary? So, those are really big
4 topics. And I agree with you, Steven, we
5 shouldn't just ignore them, but --

6 MEMBER MARKOWITZ: Well, you know --
7 Steve Markowitz -- just to use a different
8 federal compensation program, which is Agent
9 Orange, the VA contracts with the Institute of
10 Medicine which reviews and produces a report
11 every few years on a single agent, Agent Orange,
12 looking at the diseases in the literature. And
13 they have a whole ongoing committee, led by some
14 very well-known people, who look at this and
15 struggle with this single agent and a limited
16 amount of, frankly, scientific literature to look
17 at. It is still controversial.

18 So, here we are talking about 17,000
19 chemicals, give or take, hundreds of outcomes.
20 And I don't say that to be discouraging. I am
21 sure DOL did what they had to do, which was rely
22 in 2005 on whatever existed, which was Haz-Map.

1 How to move forward with that process
2 concretely, feasibly, it is difficult. We just
3 have to see what can really be done there.

4 CHAIR WELCH: Yes. Well, I made
5 myself a note to at least try to understand
6 better the data sources that IOM recommended like
7 IRIS, which I haven't really used much in my
8 life. And EPA is making statements about disease
9 causation and exposure levels for a different
10 purpose, but it may be very useful because they
11 do cover way more chemicals than maybe the ATSDR
12 tox profiles do.

13 So, it seems to me it will be helpful,
14 and I don't think we are going to get somebody
15 else to tell us all about it, about IRIS and the
16 National Toxicology Program and how could those
17 be considered sufficiently develop to add them,
18 to ask their contractor or Haz-Map to add them to
19 Haz-Map. That is a more narrow question, but it
20 could be very helpful to say, yes, these other
21 data sources are informative, and if they say
22 that it is causative, we could add it. That is

1 one way to approach one part of what IOM is
2 recommending.

3 MEMBER MARKOWITZ: But should DOL have
4 its own unit that does that, that monitors the
5 literature or does some sort of expedited peer
6 review with some supervision and, then, directly
7 modifies its exposure/disease database so that it
8 doesn't have to rely on Haz-Map, entirely on
9 Haz-Map? Should DOL have its own unit to do
10 that, which can perhaps do it in a more timely
11 fashion and use its own criteria, not rely on
12 whatever Haz-Map is doing? I am not saying we
13 need to give that answer, but as an example of
14 what might be done.

15 CHAIR WELCH: It is an idea, but,
16 then, on the other hand, you know, the other
17 agencies go back to CMS and do that. I mean, the
18 Air Force wanted to know if beryllium exposure
19 was a problem in Air Force operations and should
20 they be screening people, and what should the
21 medical surveillance program look like. And they
22 asked the IOM to do that. In a way, that was a

1 more simple question than Agent Orange,
2 definitely. But we know how expensive -- I mean,
3 you know, those committees cost millions of
4 dollars.

5 MEMBER MARKOWITZ: Right.

6 CHAIR WELCH: I think when NIOSH asked
7 the IOM to do sort of an expedited review of
8 their total Worker Health Program, it was still
9 hundreds of thousands of dollars to convene
10 meetings.

11 But, on the other hand, we have a
12 program here that is paying dollars in claims.
13 So, they should be getting it right. Yes, I
14 think we should talk about whether DOL should
15 have a unit to do that or they would be using
16 existing, you know, things like the IOM and spend
17 more money on it.

18 MEMBER MARKOWITZ: By the way, this
19 IOM report did not recommend an IOM committee to
20 do this.

21 (Laughter.)

22 CHAIR WELCH: Well, maybe that would

1 have been considered a self-referral, you know.

2 Well, of course, it is not, but --

3 MEMBER MARKOWITZ: Maybe or maybe they
4 thought that it was extremely difficult to do.

5 CHAIR WELCH: Yes.

6 MEMBER MARKOWITZ: Rosie could give me
7 some insight into that, actually.

8 CHAIR WELCH: Rosie is very clear she
9 didn't want anything to do with this

10 Subcommittee. She could give us some insight,

11 but she said she was very tired of the topic.

12 So, I feel like she was saying, you know, the IOM

13 gave them lots of good recommendations and now

14 they are coming back and asking the same

15 questions. They already told them what to do.

16 So, I think your synthesis, Steven, is

17 good, that they haven't acted on it. We see it

18 is a very big set of recommendations. Is there

19 something that we can propose that would be

20 effective but not as complicated or as expensive?

21 MEMBER VLIENER: This is Faye.

22 Just so you know, the recommendations

1 that IOM made have been used by claimants to try
2 to prove your claim and the links to their
3 diseases. But, because the Department of Labor
4 doesn't accept those studies and reports unless
5 someone with the appropriate degree behind them
6 writes a letter in support of the claimant, those
7 studies are not even considered factual. And so,
8 even saying to the Department of Labor, "You must
9 accept these sources" would be useful.

10 DR. DEMENT: All right. This is John.

11 Or criteria by which they may accept
12 these sources might be useful.

13 CHAIR WELCH: The other thing about
14 it, too, is that the claims -- so, let's say you
15 develop the causal relationships in the SEM more
16 fully because there aren't as many gaps. In the
17 end, the claims examiners are sending these
18 claims to a contract medical consultant to help
19 them opine on causation.

20 The cases that I see are ones where
21 the contract medical consultant has gotten, in my
22 humble opinion, completely wrong, and there is

1 plenty of evidence to show that that case is
2 related to exposure that DOE but the contract
3 medical consultant really isn't up-to-date.

4 It is a different question, but it is
5 almost as if the SEM is not enough. Having a
6 disease link in the SEM is not enough unless
7 there is also a presumption, because you get a
8 contract medical consultant and the contract
9 medical consultant is considered the one to
10 provide the answer, or maybe the industrial
11 hygienist can provide the answer. But the
12 industrial hygienist tells them that the exposure
13 occurred at a certain level that is medically-
14 significant and, then, the CMC says, then, that
15 is causally-related to their disease.

16 In theory, a worker could apply,
17 provide information that is not in the SEM. It
18 could go to the contract medical consultant and
19 they could award the claim based on their own
20 review process. It doesn't happen that way, but
21 it might be happening and we don't know about it,
22 because we all hear about the claims that didn't

1 make it through.

2 MEMBER MARKOWITZ: This is Steve
3 Markowitz.

4 This is where, actually, looking some
5 claims initially will give some insight into
6 how --

7 CHAIR WELCH: Yes.

8 MEMBER MARKOWITZ: -- these medical
9 consultants pay attention or not to the SEM and
10 what the quality of their own review is --

11 CHAIR WELCH: Right.

12 MEMBER MARKOWITZ: -- or how they go
13 about doing a review.

14 We will need a larger sample to get a
15 truer picture, but even an initial review gives
16 us some insight.

17 CHAIR WELCH: I agree.

18 MEMBER WHITLEY: Garry here.

19 I would like to see those slides that
20 they give the claims examiners for their training
21 and what DOL is telling the claims examiner this
22 is what to use to deny or recommend that claim,

1 because sometimes I think it never gets to the
2 CMEs, and the claims examiner just makes a
3 recommendation and denies it. I believe
4 sometimes it is only on the SEM, nothing else.

5 CHAIR WELCH: I think that was on our
6 request after our April meeting, was the training
7 for the claims examiners. I am going to see if I
8 have that.

9 MEMBER GRIFFON: Laurie, this is Mark
10 Griffon.

11 Also, just to go on with what Garry
12 was just saying, I think it might be useful as we
13 look at the sampling of claims to also look at
14 the procedures that they are using, sort of the
15 process they go through, as Steve said, in
16 assessing a claim.

17 I mean, as far as I can tell, some of
18 the procedures are on the website, but I don't
19 know -- like I am looking at these Part 2
20 procedures, and specifically one that applies is
21 the 2-0700 establishing toxic substance exposure.
22 There's a couple others that also probably apply,

1 including the Resource Center.

2 But I don't know if this is all of the
3 procedures or there are other internal
4 procedures. For instance, on this thing they
5 mention a script that the Resource Center should
6 follow in doing the Occupational Health
7 Questionnaire, and I don't see the script
8 attached as an appendix or anything. So, I
9 wonder if there are other procedures that the
10 Resource Center, that the claims examiners, all
11 these different levels, if they have different
12 procedures that they are following.

13 Because I think another thing that got
14 raised during our discussion is, even more so
15 than on the radiation side, I think this side of
16 the program could be quite reliant on
17 professional judgment. And I wonder where -- I
18 think because we looked through these claims and
19 the procedures -- we might think about where does
20 professional judgment come into play and how is
21 DOL assuring consistency in quality in those?
22 You know, is it the luck of the draw? If I get

1 one claims examiner, I am not going to go through
2 versus another one I am very likely to get
3 through? I mean, that is all part of this, I
4 guess.

5 But I think we should have the
6 procedures along with these plans to look at. I
7 think that would be very helpful.

8 CHAIR WELCH: Very good point.

9 MEMBER MARKOWITZ: Steve Markowitz.

10 So, to formulate the request -- I am
11 getting this down and Carrie is committed to
12 getting this down -- it is to request the
13 additional materials, at least request the
14 training materials or PowerPoints that are used
15 specifically for the claims examiners, but, more
16 broadly, any written sources of guidance,
17 instructions, or procedures beyond those that are
18 available on the website that are used by claims
19 examiners, the physicians, the industrial
20 hygienists, or whichever other personnel, to
21 process claims. Is that what it is? Is that the
22 request?

1 MEMBER GRIFFON: Yes, that's great,
2 Steve. That sounds good.

3 CHAIR WELCH: And the other
4 Subcommittee, I don't know if they have had their
5 call yet, but it would seem like that is what
6 they would be asking for as well.

7 MEMBER MARKOWITZ: The IHMD? Yes.

8 CHAIR WELCH: Yes.

9 MEMBER MARKOWITZ: They haven't had
10 the call yet?

11 CHAIR WELCH: But, yes, I think you've
12 got it.

13 I know we have transcript and meeting
14 minutes, but I can summarize our conversation and
15 have Carrie see if she caught all the same action
16 items and send it to all. And then, we can be
17 sure we have captured everything we talked about.

18 And then, Steven and Carrie will do
19 their best to get the data on distribution of
20 claims, including sites, you know, diagnosis
21 accepted, rejected, site. I am not sure what
22 else we would want, but we could think about

1 that. We don't really know what their fields
2 are, but that would get us started. And we could
3 get that fairly quickly and, then, ask for some
4 files to review in advance of a call at the end
5 of September.

6 DR. DEMENT: This is John.

7 In the Part B claims data file, now we
8 will receive information that, basically, the
9 site, the disease, whether or not it was accepted
10 or rejected, but we never got anything with
11 regard to the reasons for denial. Now I would
12 request, if we did a dataset for Part E, that we
13 specifically ask for, either in the coded
14 fields -- and if it is not coded, the pretext
15 description of the reason for denial would be
16 acceptable.

17 But allow us to look at a lot more
18 claims quickly and summarize them, as opposed to
19 getting a much smaller list of claims to go
20 through in great detail, I think will be a good
21 supplement to that detailed review.

22 CHAIR WELCH: Yes. And if they don't

1 collect that information at all, that will be
2 helpful to know.

3 DR. DEMENT: Yes. I would assume, I
4 would hope, though, the database that was used
5 for processing claims would also have something
6 there with regard to the reasons for denial.

7 CHAIR WELCH: Yes, I hope so.

8 Of course, specific requests are going
9 to be the claims data, what we just said in terms
10 of training materials and guidance for the IH,
11 CMCs, for processing the claims. And we are
12 going to want them at the DOL's Board meeting to
13 discuss did they have a plan for implementing the
14 recommendations.

15 And then, we have a whole lot of other
16 points that we have discussed that we will keep
17 our eye on as we move forward through the
18 discussions. We wanted to know, in addition to
19 that source of guidance for examiners and claims,
20 we also want details on the Occupational History
21 Questionnaire, the interview. Is there a script?
22 How do they help the worker? Is there any

1 quality assurance? And I will go through my
2 notes and see if there is any other specific data
3 requests and make sure to get those off right
4 away.

5 MEMBER MARKOWITZ: Steve Markowitz.

6 Can I just mention something that we
7 haven't really discussed? I think we ought to
8 take a look at the examples when DOL has evolved
9 toward using presumptions. It is a limited
10 number of instances. It is the asthma, the stuff
11 that is COPD. But to look at how they have done
12 that, so that we can understand their thinking.
13 And, also, it is helpful because it sets certain
14 precedents. If we decide to encourage the
15 further development of presumptions, it will give
16 us some understanding as to how they have
17 approached it so far and, therefore, how it could
18 be extended.

19 CHAIR WELCH: Okay. Good.

20 And I'm just adding a note that, if we
21 get around to developing, to talking about
22 presumptions, we would want to outline a process

1 for that --

2 MEMBER MARKOWITZ: Right.

3 CHAIR WELCH: -- and include some
4 external peer review in some way, even if the
5 Board were to develop it, to be able to send it
6 for input from others.

7 MEMBER MARKOWITZ: You know, the
8 importance of that is that the very ambitious
9 scientific process that IOM laid out, which is
10 long-term and difficult to achieve, that short of
11 achieving that level of scrutiny, us a describing
12 a presumptions process can use limited science
13 and at the same time inform what the intent of
14 this whole program is, which is to give the
15 claimants the benefit of the doubt and, also,
16 acknowledges the fact that the exposure
17 information is extremely limited going back
18 decades. Anyway, yes, that's it.

19 CHAIR WELCH: All right. Okay. So,
20 I will work with Carrie, and she is going to get
21 the request off to DOL, and write up notes so you
22 all can see what I think we talked about, which

1 you can completely pick apart.

2 And we will schedule a call for
3 September.

4 Any last thoughts before we go?

5 (No response.)

6 CHAIR WELCH: Thank you all so much.
7 I feel like I prepared and, then, just got
8 fantastic ideas from everybody on the call. We
9 really have a fantastic group.

10 And if anybody else wants to take over
11 the chair, any one of you could do better than I
12 did, but I know someone has got to do the task.
13 So, I will keep it up.

14 But keep coming in with those great
15 ideas. Thank you so much.

16 And we'll be in touch.

17 (Whereupon, at 2:53 p.m., the
18 teleconference was concluded.)
19
20
21
22

A

ability 43:22
able 27:4,16 32:4 93:5
absence 57:15
absolutely 37:15 47:18
 60:20 75:20
abstract 33:11
accept 21:14 77:16
 83:4,9,11
acceptable 70:16,21
 90:16
acceptance 28:18
accepted 25:17 26:14
 65:12 89:21 90:9
accepting 26:22
access 18:6,8,19
accomplished 71:20
 73:7
accurate 8:19
achieve 93:10
achieving 93:11
acknowledged 62:22
acknowledges 93:16
acted 82:17
action 31:18 89:15
actual 22:11
add 17:16 65:2 77:17
 79:17,18,22
adding 12:20 78:1
 92:20
addition 91:18
additional 77:17 88:13
address 41:16 55:2,3
 57:8 66:7 70:3
addressed 55:12 74:14
addressing 72:10
adjective 54:19
adjudicated 50:9
adjusting 65:17
adjustment 56:6
administered 45:5
administration 37:21
advance 7:11 20:16
 90:4
advise 10:16 13:7
advisory 1:3 2:3 5:6 6:9
 7:3 8:5,9 9:15 10:2,15
 11:4,11 63:4 64:6,12
 65:6 68:5,13,21 69:18
affect 12:15
agencies 63:7 80:17
agenda 7:13 13:12,19
 16:3 36:11 51:7 54:22
agent 22:19 78:8,11,11
 78:15 81:1
aggravate 71:14
aggravation 16:21
aging 30:1,3

agree 15:12,15 17:14
 18:16 19:17 23:6
 24:10,11 29:12 34:4
 38:14 40:4,8,21 41:13
 42:9,11 58:5 70:4,21
 71:5 72:5,5,12 76:3,9
 78:4 85:17
ahead 36:15 38:3
aim 16:3
Air 80:18,19
Alamos 41:8
algorithm 24:17
allow 40:5 90:17
allowed 21:14
alternative 70:16,18
ambitious 47:8 93:8
amount 78:16
analysis 14:3 30:8
 35:20
animal 38:22 69:9
answer 19:18 20:1
 42:19 80:13 84:10,11
answered 45:1 59:17
anybody 28:11 94:10
anytime 68:11
anyway 40:12 43:4
 93:18
apart 94:1
Apologies 7:12
appear 76:13
appeared 22:14
appears 66:6
appendix 87:8
applications 26:22
applies 86:20
apply 60:11 84:16
 86:22
appreciate 5:11
approach 15:13 28:8,9
 33:14 69:16 77:20
 80:1
approached 92:17
appropriate 65:2 83:5
approved 27:21
April 8:10 18:1 71:10
 86:6
arbitrary 60:13
area 1:5 3:11 13:17
argue 16:6
arrived 57:12
asbestos 50:22 74:16
asked 8:8 11:20 13:8,21
 18:2 20:4,15,19 26:21
 30:13 37:10 45:5 61:8
 61:16 66:7 80:22 81:6
asking 16:18 36:8
 37:22 45:14 75:19
 82:14 89:6

assess 3:15 13:21 17:6
 21:6 74:3
assesses 13:22
assessing 3:18 86:16
assessment 3:12 14:18
 15:2,3,8 16:7,12 17:1
 22:15,17,21 28:2 40:1
 58:4 60:8 65:8
assessors' 41:4
assistance 30:14
assisting 65:14
associated 30:1
association 64:17
assume 73:3 91:3
assurance 63:22 92:1
assuring 87:21
asthma 92:10
ATSDR 62:18 79:11
attach 38:4
attached 87:8
attention 85:9
authority 9:3
authorized 21:16
authors' 62:8
available 6:18 9:5,8,13
 10:11 11:6 41:5,9
 60:10 88:18
award 84:19
aware 9:21 38:10 59:6

B

b 14:15 21:4 24:21
 25:18 90:7
back 13:11 22:16 29:20
 35:15 40:12 48:1 51:9
 51:14 54:1 60:22
 80:17 82:14 93:17
background 11:3 57:11
balance 50:16
bang 26:4
base 64:15 69:2 70:11
based 14:8 22:22 28:17
 28:19 37:16 38:20,21
 45:16 50:9 62:8 84:19
basically 38:14 59:17
 59:19 90:8
basing 59:20
basis 64:4
beautiful 27:11
beginning 64:7
believe 15:15 56:12
 70:2 86:3
bench 44:4
benefit 93:15
benzene 74:16,19
 75:17
beryllium 27:2,4,13
 35:22 80:18

best 25:9 43:21 46:19
 48:16 89:19
better 12:18 13:1 31:9
 40:6 44:18 49:3 60:9
 70:16 74:4 79:6 94:11
beyond 16:7 62:17
 69:19 88:17
big 10:21 20:12 46:7
 55:14 62:16 67:15,22
 68:9 71:5 78:3 82:18
bigger 66:8
bioassay 56:11,13
biologic 22:19
bit 18:10 25:2 30:17
 41:11 72:14
Board 1:3 2:3 5:6,12
 6:9 7:3 8:1,9,13 9:16
 9:19 10:2,16 11:4,12
 11:14,16,19 15:9 22:6
 31:9 38:19 45:21 63:5
 66:13 67:5 68:5 70:14
 71:1,1 91:12 93:5
Board's 5:9 6:18 7:1,7
 8:5 9:6,14 37:9
bottom 12:13
brand 19:15
breakdown 26:21
breaks 6:15
bring 71:16
bring 49:19,20 64:9
broad 10:17 71:17
broader 16:22 70:3
broadly 73:16 88:16
brought 18:2
buck 26:4
building 45:22 56:9
bypass 29:11

C

c 14:15
C-O-N-T-E-N-T-S 3:1
cadmium 74:16
cadre 47:11
California 62:22
call 3:3 5:14 13:12
 14:17 32:2,12,13
 33:17 34:9 36:10
 44:18 67:14,17 68:19
 89:5,10 90:4 94:2,8
call-in 8:4
called 68:8
calling 69:17
calls 33:15 34:11
can/should 3:15 21:6
cancer 16:18 62:5 69:3
 69:7 71:16 74:15
 75:10
cancers 75:2,7,7 76:1

- capacity** 9:17
captured 89:17
carcinogen 62:5 76:12
carcinogenicity 62:3
careful 69:22
Carrie 2:6 3:4,9 5:4
 10:6,8 12:1 13:11
 19:19 20:16 32:5 33:8
 33:21 34:16 35:13,18
 36:4,7,8 88:11 89:15
 89:18 93:20
case 22:7 24:15 30:6
 41:7 48:12 50:9 65:22
 84:1
cases 25:1,4 27:13
 30:10 34:7 39:8,9
 40:10,11,14,16,18
 48:17,18 50:17 51:12
 73:10 83:20
categories 28:22 46:9
 52:11,15
category 64:16
caught 89:15
causal 64:15 65:20 69:2
 77:16 83:15
causality 24:18 76:5
causally-related 84:15
causation 12:12 14:3,7
 16:21 62:10 63:6,7
 79:9 83:19
causative 49:9 79:22
cause 71:14 75:17
caused 68:13
causes 62:4 69:7
cement 22:20
Center 43:14 47:21
 87:1,5,10
Centers 45:7
certain 30:18 31:7
 84:13 92:13
certainly 28:6 50:3
certified 9:4
cetera 16:18
chair 1:13,20 3:7,13,16
 3:19,22 4:2,6,8,10
 5:16,18 10:4,6 15:9
 17:2 19:6 20:3 21:1,4
 23:6 24:9,20 26:5
 27:9 28:16 29:2,19
 31:12,15 32:11 33:2,5
 35:3,13 36:5,15,18
 37:4,7 38:4 39:15,19
 40:9 41:12,21 44:21
 45:19 46:6,13 47:5,17
 49:5 50:14 53:2,13,18
 54:4,14 57:5,13 58:8
 58:22 59:11 60:1,19
 61:1,5 67:13 68:7
 70:4 72:1,5 73:8 75:1
 75:5,16 76:9 77:1,5
 79:4 80:15 81:6,22
 82:5,8 83:13 85:7,11
 85:17 86:5 88:8 89:3
 89:8,11 90:22 91:7
 92:19 93:3,19 94:6,11
challenging 47:16
 51:12
chance 32:6 38:7
charge 3:6,21 10:14
 11:13 13:7 27:15
 69:20
check 18:7
chemical 18:13 48:14
 49:1 56:19 65:2 68:13
chemicals 48:2 54:11
 78:19 79:11
chemists 44:2
choose 33:6,15
circular 21:7 22:16
 58:21
circulars 59:6
claim 19:5 20:13 26:13
 39:11 49:21 83:2
 84:19 85:22 86:16
claimant 2:1 18:12 19:4
 48:7 83:6
claimants 3:12 14:1
 20:9 49:3 52:2 83:1
 93:15
claims 19:12 20:4,7,12
 21:8,17 23:8 24:2
 25:8,19,21 26:10,19
 26:22 27:6,19 28:14
 29:7 30:7,18,21 31:8
 32:6,14,15,21 34:20
 34:22 35:4,21 37:1
 39:13,22 41:4,20 42:3
 42:5 47:21 48:17,18
 50:2,22 51:12 52:3
 65:13,14,18 67:19
 73:13 74:5 81:12
 83:14,17,18 84:22
 85:5,20,21 86:2,7,13
 87:10,18 88:1,15,18
 88:21 89:20 90:7,18
 90:19 91:5,9,11,19
clarify 13:15
clear 52:4 62:6 64:21
 82:8
clearances 18:19
clearly 8:16 15:12
 17:18 50:17
clicking 7:8
closely 29:17
CMC 84:14
CMCs 91:11
CMEs 86:2
CMS 80:17
code 26:21 30:8 35:9
 35:20
coded 90:13,14
codes 27:3 28:19
codified 46:18
Cohorts 18:21
Cold 57:3
collect 44:13 91:1
collecting 43:6 44:15
 52:2 73:22
come 24:18 41:20 48:1
 56:3 57:4 70:17 87:20
comes 22:18 33:10
 53:22 76:19 77:10
coming 27:20 82:14
 94:14
comment 8:3 35:6 39:5
 55:20 59:9
comments 6:17 46:4
 72:10 76:4
committed 88:11
committee 3:21 11:8
 12:7 14:2,16 15:3,17
 21:21 23:17 24:12,21
 25:15,18 27:11,18
 35:7 37:2 38:11 46:15
 66:4,11 68:1 78:13
 81:19
committees 81:3
common 26:16 29:6,8,9
 29:14 30:10 73:12
COMMUNITY 1:16,19
 2:1
compare 42:16
compensation 44:20
 78:8
complete 22:6 43:10
completed 22:11 43:13
 45:7
completely 22:22 54:18
 83:22 94:1
complex 17:9,10 62:12
 65:9
complicated 17:7 82:20
computer 27:7,10
concern 19:1
concerns 18:10 54:12
concluded 94:18
conclusion 57:12
concretely 26:15 79:2
conditions 3:20 12:15
 20:8 30:4 37:2 71:15
 71:17 74:13
conference 32:2 34:9
confident 27:5
conjunction 43:14
connection 15:7
considered 23:13 52:9
 52:10 57:2 75:8 77:15
 79:17 82:1 83:7 84:9
considers 52:13
consistency 87:21
consists 11:1
consolidate 19:15
constituted 66:13
constitutes 68:5
constrained 17:5
construct 24:6
construction 46:10,11
consultant 83:18,21
 84:3,8,9,18
consultants 85:9
contacted 45:21
contains 7:10
contemporary 76:7
continue 9:22 26:11
continuously 63:5
contract 56:3 66:21
 83:18,21 84:2,8,8,18
contractor 56:2 73:21
 79:18
contractors 12:20
contracts 78:9
contribute 71:14
contribution 16:21
 62:11
contributory 49:9
controversial 78:17
controversy 69:13
convene 10:1 81:9
conversation 23:17
 26:9 40:13 89:14
convey 12:18 13:2
coordinator 45:20
COPD 22:7,19 24:15
 26:10,12 38:6 41:7
 49:6 92:11
Copies 6:16
copy 58:18
cost 81:3
couple 17:22 34:3
 86:22
course 26:7 53:11 82:2
 91:8
cover 3:12 79:11
covered 51:6
created 66:1
criteria 16:19 58:14
 62:6 64:14,15 69:1,6
 70:10 75:5 76:5 80:11
 83:11
critique 43:9 70:1
cues 44:8
curious 38:16

current 20:7 68:4
cursor 45:17
cuts 54:9

D

D 2:2
D.C 18:1
d.htm 7:3
data 4:7 12:20 17:12
 20:4,14 25:19 26:2
 33:21 35:8,20 36:21
 39:4 41:5 42:4,8
 51:10 53:1,4,6,17
 54:2,7,8,21 55:17
 56:18,19 57:15 59:18
 61:13 62:19 63:18,22
 64:21 67:2 73:12 78:1
 79:6,21 89:19 90:7
 91:9 92:2
database 15:16,18 16:1
 16:4 28:14 29:20
 30:20 32:4,18 33:6,10
 47:22 48:6,8,21 80:7
 91:4
databases 19:10 61:19
dataset 34:10 90:12
date 57:18 77:4
dates 36:9
daunting 46:11
day 9:9 49:1
days 9:6,14
de- 31:7
de-identify 32:16
dealt 17:9
decades 47:7 93:18
decide 32:1,5 40:7 66:5
 69:6 71:7 92:14
deciding 63:6
decision 48:11 52:10
 59:20 69:12
decisions 59:10 73:18
dedicated 7:9
DEEOIC 12:8
defer 55:13
define 3:10 4:7 30:5
definitely 19:18 23:14
 30:11 81:2
degree 63:8 83:5
delay 76:17
Dement 1:17 5:20,21
 14:20,20 22:4 24:10
 25:11 27:7 28:13,17
 29:12 42:10,21 44:6
 45:12 46:5,8 72:7
 74:11 75:3,14 76:3
 77:2 83:10 90:6 91:3
dementia 30:1
demonstrate 14:7 51:1

55:16
denial 28:19 90:11,15
 91:6
denials 27:1
denied 25:17 27:21
denies 86:3
deny 85:22
Department 1:1 5:6
 11:10,12 43:18 52:13
 52:17 58:15,16,19
 61:8 83:3,8
depending 40:22
derived 61:11
describe 55:4 57:19
 69:2 71:20
describes 55:4 68:5
describing 93:11
description 43:1 90:15
Designated 2:5 3:4,9
 5:9
designed 45:10,11
detail 29:1 30:10 90:20
detailed 9:12 44:1
 90:21
details 91:20
determination 24:18
determinative 57:16
determine 30:5 64:18
 65:13
develop 4:1 38:5 45:2
 64:20 73:16 79:17
 83:15 93:5
developed 38:8 66:22
developing 30:3 37:1,9
 92:21
development 3:20
 46:17 92:15
DFO 5:9
DIAB 58:11
diabetes 71:16
diagnoses 26:17 30:11
 30:21 33:11,12 36:1
 50:3 71:14
diagnosis 89:20
diagnostic 16:19
dictate 43:3
diesel 22:20
different 18:3 19:10
 22:18 28:9 30:20
 38:22 39:3 40:18,18
 41:4,5,6,7,8 46:9
 49:14 56:15 68:2 77:8
 78:7 79:9 84:4 87:11
 87:11
differently 29:10
difficult 38:17 49:11
 55:15 63:1 73:18 74:6
 79:2 82:4 93:10

difficulty 37:17
direct 26:3
direction 40:7 72:17
directly 80:6
disagree 15:12 39:10
 54:19 68:3
disclosure 9:19
discouraging 78:20
discuss 16:2 19:9 32:8
 33:7 34:9 91:13
discussed 9:20 10:8
 24:12 27:22 91:16
 92:7
discussion 3:12 6:22
 8:7,20 14:13 16:10
 22:6 35:2 39:16 87:14
discussions 8:14 46:18
 91:18
disease 11:22 12:9
 16:17 17:4 24:22 30:2
 38:2 41:1 61:10 68:12
 71:17 73:11,12,14
 79:8 84:6,15 90:9
disease-specific 20:13
disease/exposure
 17:18 55:11 73:17
diseases 12:11 13:10
 15:22 16:8,17 25:12
 29:6 36:22 37:19 55:5
 65:8 74:9 78:12 83:3
disjoint 23:3
distilling 49:8
distinction 60:14,18
distribution 89:19
dividing 40:11
document 11:6 12:2
 66:9
documentation 10:20
 64:20
documents 6:20 38:5
 64:2 71:11
DOE 18:21 36:21 41:3
 53:19 58:12 59:6,19
 84:2
doing 13:5 27:11 37:4
 39:11 40:11 42:6 56:4
 80:12 85:13 87:6
DOL 10:16,19 11:18,20
 12:19 13:7,8,15,22
 16:15,22 18:4 19:11
 19:14 24:22 30:5,19
 31:6,16 34:5,6 35:19
 37:7 46:6,15 51:19
 53:22 54:17 55:8
 57:11 58:20 59:8 60:8
 63:4,9 66:6,17 70:2,7
 72:9 77:16 78:21 80:3
 80:9 81:14 85:21

87:21 92:8 93:21
DOL's 91:12
dol.gov/owcp/energy...
 7:2
dollars 81:4,9,12
Domina 2:2 6:2,3 17:21
 55:19
doubt 93:15
Dr 5:16,19,21 6:6 10:4
 14:20 22:4 24:10
 25:11 27:7 28:13,17
 29:12 42:10,21 44:6
 45:12 46:5,8 72:7
 74:11 75:3,14 76:3
 77:2 83:10 90:6 91:3
draw 16:11 87:22
driven 25:11,15
dust 22:21

E

E 25:21 75:12,15 90:12
earlier 56:17
early 26:3
easier 40:13
easily 64:9
Eastern 1:13 6:13
easy 50:7 76:10
edition 77:10
effective 82:20
efficient 40:20 50:4
effort 57:3
either 20:5 23:10 34:17
 34:18 43:13 70:15
 71:1 90:13
email 7:18 10:10 32:5
 33:8 36:8 59:4
emphasize 47:2,3,16
employee 52:21
employees 9:18
employment 43:17
encompassing 15:4
 16:1
encourage 7:7 92:14
ended 19:19
Energy 43:19 52:18
 58:15,19
energyadvisoryboard...
 7:19
enter 9:4
entire 13:21
entirely 7:9 29:11 80:8
entry 63:22
EPA 62:19,22 79:8
epidemiologic 69:8
equitable 56:6
especially 8:18
essential 70:22
essentially 23:5

establish 11:11 62:7
63:10 64:14 69:1
70:10
established 62:10
76:13
establishing 11:19
86:21
establishment 11:16
58:14
et 16:18
eventually 26:13
everybody 5:3 8:15
10:7 38:7 94:8
evidence 64:15,16 69:1
70:10 84:1
evolved 47:7 92:8
Exactly 27:9
examiner 21:8 25:8
47:21 52:3 85:21 86:2
88:1
examiners 19:12 21:17
48:17,18 83:17 85:20
86:7 87:10 88:15,19
91:19
example 14:5,9 21:11
22:7 23:4 24:15 42:21
44:7,10 51:11 56:8
74:15 80:13
examples 73:10 92:8
Excel 25:20 27:12
excellent 76:18
exclusively 22:14
Executive 51:15
exist 42:5 43:16,17,18
55:17
existed 78:22
existing 74:22 75:20
81:16
Expand 3:12
expanded 64:16
expect 43:15
expedited 80:5 81:7
expensive 81:2 82:20
experience 37:17 44:16
62:9
experienced 44:15
expert 11:11 64:6,12
65:5 66:2 68:13,17,21
69:18
expert-based 63:2
explicitly 11:13
exposed 18:13 44:1
52:22 53:1 54:3,9
exposure 1:5 3:12,15
5:8 11:22 12:16 13:22
14:18 15:2,3,7,22
16:7,11 17:1,4,6,8
18:21 19:16 21:6,9,13

22:15,17 23:12 24:6
37:18 38:2 40:2 41:5
41:11 43:4 44:11
45:10 53:21 55:12,13
57:21 58:2,4,20,21
60:8 61:10,15,16 65:3
65:22 73:13,22 74:1,9
79:9 80:18 84:2,12
86:21 93:16
exposure/causation
40:3
exposure/disease
61:19 80:7
exposures 14:9 22:19
43:16 49:9 52:12,15
55:4,5,6,7,9 58:17
60:12,13 62:13 65:9
74:2,3
expressed 15:11
expressing 39:20
extended 92:18
external 65:11 93:4
extraordinary 72:16
extremely 82:4 93:17
eye 91:17

F

FACA 9:7
fact 16:4 19:10 55:3
93:16
factors 39:2
factual 83:7
fail 26:12
fairly 29:13 90:3
fall 3:20 37:2 50:2 72:13
falling 17:20
fantastic 94:8,9
far 42:13,22 44:20
45:17 63:20 86:17
92:17
fashion 80:11
fast 51:8 76:22
Faye 2:4 6:8 35:12
42:20 43:11 45:6 52:7
58:10 82:21
feasibly 71:7,22 72:4
79:2
federal 2:5 3:4,9 5:9
34:15 78:8
feel 70:7 73:9,15 82:12
94:7
feeling 34:10
fewer 19:12 73:13
fields 65:2 90:1,14
figure 25:3 35:18 60:7
67:1
file 23:10 90:7
files 33:12,13 34:2

35:15 90:4
filling 52:5
final 20:1
finally 16:14
find 18:7 51:16 54:11
58:6 70:19
finding 17:19 64:10
74:2
findings 39:10
finds 34:16
fine 28:7 35:6
first 5:11 7:5 10:15
34:17 40:8 47:20
53:11 55:1
fit 49:10
five 40:14 77:7
fix 26:16
flat 66:17
Flats 41:7
focus 13:20 61:10
focused 67:17
focusing 14:11 61:12
follow 4:5 6:21 20:22
87:6
following 87:12
force 17:12 80:18,19
forget 17:4
form 15:5 45:9
formal 9:10
Former 44:12 46:22
formulate 34:20 35:14
88:10
formulation 68:4
forward 46:16 49:20,20
49:21 79:1 91:17
found 7:1 53:8
four 11:21
frankly 71:18 72:4 73:6
78:16
frequency 28:18 30:22
frequent 3:20 25:16
37:2 74:7
frequently 36:22
full 31:8
fully 83:16
functionality 63:13
funding 56:5,12
funds 50:21
further 92:15

G

gap 18:5
gaps 83:16
Garry 2:2 5:22 15:14
47:19 49:12 56:22
85:18 86:11
general 20:4 39:13
generally-accepted

69:16
getting 20:18 26:10
34:17 44:19 52:4
76:17 81:13 88:11,12
90:19
give 34:5 57:7 59:19
78:19 80:13 82:6,10
85:5,20 92:15 93:14
given 22:10 68:12
gives 85:15
giving 5:13 42:17 52:3
go 10:13 12:4 13:9
36:15 38:10 39:9 40:7
48:20 51:9,13 55:10
60:22 63:17 75:12
80:17 84:18 85:12
86:11,15 88:1 90:19
92:1 94:4
goal 16:9 39:6,14 42:2
goes 15:1
going 17:4 23:16 25:7
26:11 28:12 29:8 32:1
32:14 33:19 39:8 40:1
46:17 53:14,16 54:11
54:17 55:2 56:2,5,7
57:10,16 58:1,5 59:12
60:10,11,13 64:21
69:6,7,9,10 71:8
79:14 86:7 88:1 91:8
91:12 93:17,20
good 5:3 12:22 13:3
19:7 21:1 23:4 24:9
41:13 44:6 49:5,21
50:5 54:19 65:22
67:10 72:14 82:13,17
88:8 89:2 90:20 92:19
Google 7:3
gotten 20:5,13 83:21
government 9:18
great 6:12 33:5 36:5
60:2 89:1 90:20 94:14
greater 29:16
greatly 63:13
Greg 58:13
Griffon 1:18 6:4,5 38:12
38:13 39:17 40:4,21
41:17,22 42:9 47:2
86:9,10 89:1
group 40:15 62:5 76:12
94:9
groups 48:6
guess 14:4 33:1 35:17
51:13 67:16 75:22
88:4
guidance 11:21 12:8,11
13:10 42:16 75:17
88:16 91:10,19

H

half 18:9
hand 80:16 81:11
handle 62:12
Hanford's 56:8
hanging 74:8
happen 30:19 84:20
happening 76:17 84:21
happy 35:3 51:14
hard 50:20 74:3
harder 19:4 25:3
hate 51:6
Haz-Map 16:1,4,5 22:18
61:11 62:1,2,11,13,18
66:22 68:16 75:6,6,22
76:4 78:22 79:18,19
80:8,9,12
hazard 57:3
head 77:19
heading 6:19 24:1
31:10
Headquarters 58:12
Health 1:3 5:7 7:4 10:3
48:1 51:22 69:4 81:8
87:6
hear 21:15 72:8,22 73:5
84:22
heard 11:4 18:9 45:6
hearing 9:1
heart 71:17
held 32:17
help 12:19 16:19 36:4
37:8,9 43:7 44:7,14
45:18 46:1,8 48:7,12
48:16 49:3,4 52:5
55:8 73:10 74:5 83:18
91:22
helped 47:22
helpful 13:14 25:2 26:7
35:11 51:16 52:16
67:15 79:13,20 88:7
91:2 92:13
helping 42:15 60:16
73:15
helps 49:19
high 20:6
high-quality 47:9
higher 31:20
hire 70:13 71:2
histories 42:12,18
44:16,19
history 14:6 15:4,6,6
17:11 22:11 23:2 43:6
43:12,21 44:8,18 45:3
45:8 46:1,12 91:20
holes 14:2 15:8
hope 31:12 91:4,7
hopefully 31:6 34:20

hoping 31:3,4,7
human 69:8
humble 83:22
hundreds 78:19 81:9
hygienist 43:2 84:11,12
hygienists 88:20

I

IARC 62:5 64:17 74:14
74:20 76:11
ICD 26:21 28:19 30:8
35:9,20
ICD-9 27:3
idea 20:17 30:17 32:3
38:15 67:10 80:15
Ideally 32:21
ideas 94:8,15
identification 65:9
identified 31:8
identify 24:3,5
ignore 78:5
IH 22:15,17,21 23:18
25:5 28:3 91:10
IHMD 89:7
IHs 3:18
illustrative 30:9
imagine 50:11
imagining 33:9
immediate 64:13 68:22
70:8
immense 71:18
implement 17:17 70:20
72:15
implemented 67:6,7,11
72:22 73:2
implementing 91:13
imply 60:10
importance 93:8
important 17:15 23:11
23:19 25:14 30:4
31:19 35:17 39:15
impossible 17:7 72:14
impressed 46:3
improve 46:1,16 60:8
60:16 63:19
improved 63:13
improvements 65:15
improving 4:1 20:11
26:18 45:2
incidents 45:13
include 30:11 64:16
93:3
includes 15:21
including 9:20 12:12
15:5 16:17 50:17
65:10 71:16 87:1
89:20
inclusive 50:16

incomplete 15:16 22:1
42:14 45:16 52:14
incorporate 62:17 67:1
increase 44:10
individual 22:8 30:6
40:2 44:14 50:10
individually 39:9
industrial 84:10,12
88:19
inefficient 28:10
info 20:18
inform 41:10 61:18
93:13
information 4:7 8:4
12:18 13:2 15:1 21:9
21:10,13 22:10,13,22
24:8 30:20 31:5 43:1
43:15 44:13 46:20
47:9,14 49:16 50:10
51:10 52:2,12,17
53:10,13 58:13,16,20
59:12 60:9 61:15,17
62:17,21 63:1 64:18
65:4 68:12 69:11
73:22 74:1,10 84:17
90:8 91:1 93:17
informative 79:21
initial 85:15
initially 10:13 85:5
input 38:1 93:6
inputs 25:9 26:18 28:4
67:18
insight 82:7,10 85:5,16
instance 87:4
instances 92:10
Institute 11:5 66:16
78:9
instructions 88:17
intended 62:1
intense 44:10
intensity 43:4
intent 93:13
intentions 51:3
Interact 3:17
interact/overlap 28:2
interactions 65:3
interactive 7:22
interesting 59:1,3
internal 87:3
interpreting 24:7
interview 91:21
interviewer 49:14
interviewers 44:14
47:11
interviewing 45:9
introduction 13:6
Introductions 3:3
introductory 10:9

involve 38:1
involved 46:22 47:3
59:7
involves 16:8
IOM 4:5 11:15,18 12:21
14:1 16:2 17:8 19:9
51:14,18 60:22 61:9
61:20 65:21 67:7 68:5
68:8,14 69:17 70:1
72:3,13 76:4 77:11,20
79:6 80:1,22 81:7,16
81:19,19 82:12 83:1
93:9
IOM's 17:15
IRIS 62:19 63:9 79:7,15
issue 9:1 16:7,22
issues 3:10 13:16
item 36:11 44:22 45:1
itemized 12:7
items 3:8,14 19:20 21:6
31:18 89:16

J

job 13:3,4 27:11 47:4
47:10
John 1:17 5:19 14:20
15:11 22:4 23:6 24:11
24:20 30:8 42:10
45:21 46:3 72:7 74:11
76:10 83:10 90:6
John's 15:10 27:10
joining 7:20
judgment 87:17,20
JULY 1:10

K

keep 23:15 28:12 54:22
58:5 91:16 94:13,14
kidney 74:15
kind 27:14,19 28:20
33:9 42:7 44:22 47:12
50:14 58:7 63:10
71:18 76:17
kinds 49:8
Kirk 2:2 6:2 17:21 41:14
55:19
knew 44:4
know 7:12 8:22 14:1
15:21 16:2,6 18:11,20
19:7 20:15 21:2 25:5
25:11 26:5 32:14,17
35:19 37:7,15 43:16
47:12,12 49:7 51:13
52:21 53:10 55:1,13
55:20,21 56:18 59:14
59:15 61:11 66:18
70:10 71:13 72:8 73:6
74:19 75:9 76:6,15,15

77:6,22 78:6 80:16,18
81:2,3,16 82:1,12,22
84:21 86:19 87:2,22
89:4,13,20 90:1 91:2
91:18 93:7 94:12
knowing 18:5
knowledge 69:16
known 44:10 75:17
Krieger 77:7

L

lab 44:4 69:10
labor 1:1 11:10,12 46:9
46:10 52:11,13,15
58:16 61:8 83:3,8
Labor's 5:6
laboratory 44:3
laid 93:9
large 15:16 18:11 34:9
41:3
larger 85:14
late 7:12
Laughter 81:21
Laura 1:13,20 3:6,13,15
3:18 4:6,8,10 5:16
16:16 28:15 36:13,13
Laurie 3:21 4:2 14:21
22:4 25:12 32:10
38:12 60:21 68:10
70:5 86:9
law 11:15
lay 11:9
laying 13:4
lays 3:14 21:5,22
lead 34:14
learn 43:5
leave 33:15
leaving 74:8
led 78:13
Leiton 26:8
let's 12:5 55:13 76:7
77:6 83:14
letter 83:6
level 63:8 84:13 93:11
levels 57:22 58:1 79:9
87:11
Lewis 58:13
life 79:8
limit 16:11
limited 78:15 92:9
93:12,17
line 5:15,17 6:10 8:15
45:19
lines 20:4
link 7:5 17:18 40:3 50:1
61:10,19 68:16,16
72:11 73:13 76:12
84:6

linkage 29:15,17 45:18
linkages 12:8 16:8 38:2
linked 55:5,5
links 11:22 15:22 17:4
62:2,10 64:15 65:7,10
65:12,13,19,20,22
66:3 68:11 69:2 70:12
73:17 77:17 78:2 83:2
list 16:15 19:20 25:13
29:13,21 30:12,13
33:13 44:1 53:6 65:16
71:12,15 74:12 75:2,7
75:9,11 90:19
listed 12:13 45:16
listen 77:22
listen-in 8:6
listing 6:19
literature 16:20 29:18
49:8 63:6 68:15 76:8
78:12,16 80:5
little 7:12 18:10,11 25:2
30:17 41:11 42:22
50:15 72:3,14,17,18
73:3 74:9
Logistics 3:3
long 34:21 56:21,22
61:7
long-term 93:10
longer 20:22
look 14:22 15:17 17:15
18:4 22:16 24:1,13,16
26:2 28:4,18,22 29:5
29:8,17,20 30:9,16
31:8 32:4,6,7,19,21
33:7,8,12 35:11,21
40:10,15 41:6,8,20
42:6 43:8 48:10,12,21
52:11,11 53:9,11,14
55:22 56:16 57:4
63:15,17 69:8,9,10
71:10,22 75:9 78:14
78:16 80:21 86:13,13
88:6 90:17 92:8,11
looked 25:18 29:9
32:14 34:22 36:21
40:14 74:17,20 87:18
looking 30:18 36:20
38:15 40:16 42:11
73:1,9,10 74:12 78:12
85:4 86:19
looks 46:15
Los 41:8
lost 73:17
lot 11:9 18:20 25:6 26:9
27:3,16 31:17 37:19
38:9 44:16 49:3 52:4
54:14 55:21 56:20
72:12 73:4 74:13,20

90:17 91:15
lots 82:13
low 57:22
low-probability 29:14
luck 87:22
lung 24:21
lymphoma 74:19 75:18

M

M 1:17 2:2
main 63:12
major 16:12 23:3 28:22
making 54:20 79:8
Manual 3:14 21:5,22
Mark 1:18 6:4 38:12
47:2 75:8 86:9
Markowitz 1:20 4:4 6:6
6:7 15:19,20 23:20,21
29:3,4 30:15,15 31:14
32:9,10,12 33:4 34:13
36:2,3,13,14,16,19
37:6,14,15 41:18,18
42:1 46:21,21 47:6
54:5,6 57:10,14 59:2
59:3 60:5,6,21 61:2
67:8,9,20,21 68:8
71:6 72:2,19,19 75:21
75:21 76:20,21 78:6,7
80:3 81:5,18 82:3,6
85:2,3,8,12 88:9,9
89:7,9 92:5,5 93:2,7
material 7:10 43:3
64:22
materials 6:16 7:14
9:16 10:8,15 88:13,14
91:10
Matrices 1:5 5:8
matrix 49:11
mean 16:20 17:3 19:17
20:5 23:7,14 25:3
26:7,20 28:3 29:7,21
31:17,18 32:10 33:19
34:14 38:16 42:1 49:6
49:13 56:21 59:5
66:10,19,19 71:6
73:19 74:7 76:11,15
80:17 81:2 86:17 88:3
meaning 37:20
means 69:3
mechanistic 69:10
med 45:20
medical 1:19 20:7 63:5
80:21 83:18,21 84:3,8
84:9,18 85:8
medically- 84:13
Medicine 11:5 66:17
78:10
meet 6:13 31:1 50:8,11

50:18 51:2,2
meeting 1:7 5:5,10,13
6:14,16,20 7:8,9,11
8:8,10,12,13,18 9:5
9:21,22 10:1,10 11:4
18:1 20:17 22:6 23:8
26:8 31:9 32:3 34:12
45:7,22 52:18 55:14
67:4,15 68:1 71:11
86:6 89:13 91:12
meetings 6:19 8:11
81:10
member 4:4 6:1,3,5,7,9
6:11 15:14,19 17:21
23:20 29:3 30:15
31:14 32:9,12 33:4
34:13 35:10 36:2,13
36:16,19 37:6,14
38:12 39:17 40:4,21
41:17,18,22 42:1,9,19
43:11 46:21 47:6,19
50:13 52:7 53:5,16,22
54:5,10 55:19 57:10
57:14 58:9 59:2,5,15
60:3,5,21 61:2 67:8
67:20 68:8 71:6 72:2
72:19 75:21 76:20
78:6 80:3 81:5,18
82:3,6,21 85:2,8,12
85:18 86:9 88:9 89:1
89:7,9 92:5 93:2,7
members 1:15 2:3 5:12
8:1 9:16,18 15:9
memo 4:3 10:18 19:11
54:16 57:9
memories 47:10
memorized 75:7
memory 57:19
mention 87:5 92:6
mentioned 23:10
met 1:13 53:20 66:11
metallurgists 44:3
middle 56:3
millions 81:3
mind 23:15
minimum 46:14
minutes 8:9 9:3,5,10
53:8 89:14
missed 39:6,18
missing 16:12 43:10
61:17 72:11
mixtures 17:9,10 62:12
model 17:13
modest 73:6
modification 13:1
modifies 80:7
modify 12:18
moment 61:6

MONDAY 1:9
money 70:13 81:17
monitor 57:1
monitored 52:19 54:12
monitoring 53:1,4,6,17
 53:21 54:2,7,8,21
 55:17 57:15,21,22
 59:18
monitors 80:4
month 32:2
months 18:9 31:2,3
morning 5:3
move 12:14 31:16,20
 38:3 42:5 79:1 91:17
moved 37:16
moves 57:18
moving 51:7
multiple 63:16
muted 8:1

N

nail 37:18
name 5:4 8:19
names 19:15
narrow 62:3 79:19
National 62:20 69:5
 77:12 79:16
nature 9:13
necessarily 38:18 52:6
 58:1 61:13
necessary 78:3
need 13:15 14:10 19:18
 24:13,16 32:19,20
 33:14,19 35:22 39:22
 47:11 49:14 55:3,20
 57:11,18 69:22 70:14
 70:19 71:19 72:16
 80:13 85:14
needed 37:20 53:10,20
 68:6 75:16
needs 4:7 13:4 18:17
 46:19 49:20 52:1
 57:17 70:14
neither 47:21 48:6
neuropathy 71:16
never 54:12 63:21 86:1
 90:10
new 12:20 65:10 68:11
 70:12 77:10 78:1,2
nice 13:4 35:21
NIH 25:7
NIOSH 18:20 81:6
NLAB's 58:11
non- 46:10
non-Advisory 8:1
non-cancer 62:6 69:15
 69:19
non-Hodgkin's 74:18

75:18
non-SEM 41:20
note 7:21 8:2 79:5
 92:20
noted 22:5 61:20 62:11
notes 92:2 93:21
notice 34:15
NTP 63:9
number 20:12,21 22:8
 24:1 31:7 32:16 41:2
 42:12 92:10

O

obscure 73:11
obtain 46:20
obtaining 15:6
obvious 25:8
obviously 9:12
occupation 22:12 23:2
occupational 12:9 14:6
 15:4 17:11 29:14,17
 42:12,18 43:12,21
 44:8,15 45:3 46:1
 51:22 65:8 87:6 91:20
occurred 30:21 55:7
 84:13
October 31:1 32:2
 34:12 73:5
offering 61:3
office 41:4
Officer 3:4,9 5:9
OFFICIAL 2:5
Oh 51:13 53:18 61:2
 75:14 77:1
OHQ 4:1 52:9
okay 5:19 17:2 20:3
 21:1,4 31:14 33:4
 35:13 36:5,6,18 53:18
 58:8 59:1 60:1,3
 92:19 93:19
once 28:3 30:7 31:5
 33:16 34:16 35:8 39:7
ones 12:12 20:21 25:16
 28:21 29:16,21,22
 30:12 42:21 50:7 66:8
 75:11 83:20
ongoing 64:3 65:6
 68:20 78:13
open 8:11 12:3 46:7
operations 80:19
opine 63:7 83:19
opinion 13:3 31:19
 83:22
opposed 73:5 90:18
options 21:22 34:3
Orange 78:9,11 81:1
order 3:3 47:13 69:11
orders 59:21

Organization 69:4
originally 11:7
OSHA 53:19
ought 15:3 25:15 28:20
 92:7
out-of-date 77:9
outcomes 29:6 62:7
 69:15,19 71:12 78:19
outline 92:22
outside 44:17
outstanding 20:21
overall 11:7,14 13:7
 30:7 39:12
overlap 3:17 28:6
overrides 21:7
oversee 65:1 70:11
overview 13:6

P

P-R-O-C-E-E-D-I-N-G-S
 5:1
p.m 1:13 5:2 6:13 94:17
page 3:2 7:8,10 10:12
 12:1,3,14 64:11 71:11
panel 64:6,13 65:6
 68:14,17,21 69:18
Parkinson's 16:17 30:1
part 14:10 16:10 24:21
 25:18,21 40:19 45:9
 56:14 58:3,11 61:12
 68:3,3 75:12,14 80:1
 86:19 88:3 90:7,12
participate 8:6
participating 7:17
Partly 73:8
parts 66:15
Pat 53:9 58:12
path 69:12,14 70:3,21
pay 85:9
paying 81:12
peer 63:3 65:7 68:10
 70:12 80:5 93:4
peer-reviewing 78:2
people 14:16 15:12
 26:13 29:6 30:3 33:17
 33:22 34:18 35:5
 36:20,22 45:4 47:13
 47:22 48:7,19 51:1,15
 51:16,21 61:4 70:13
 76:21 77:22 78:14
 80:20
people's 47:9
percent 15:15
perfect 13:18
periodic 65:11,18
permitted 11:15
person 66:1
personal 44:15

personally 48:15
personnel 24:7 88:20
pertain 60:17
phone 61:4
phones 7:22
physician 66:21
physicians 88:19
pick 77:15 94:1
picture 85:15
pie-in-the- 72:2
pie-in-the-sky 72:3
piece 16:13 43:10
pieces 24:5
pipefitter 48:3
places 54:18
plan 4:1 32:20 34:18
 36:6 45:2 52:6 66:12
 71:8 72:9 91:13
planning 6:15
plans 88:6
play 57:4 87:20
please 7:18,20 8:2,16
 8:18,22 9:21
plenty 84:1
plus 37:22
point 12:17 13:1,13
 17:8 19:7 21:4 22:2
 24:1 28:8 33:1 39:16
 41:13,15 44:7 49:6,12
 55:2 56:1 63:12,15
 64:5 68:2 69:21 70:21
 88:8
pointed 23:7 41:14
 63:20
points 11:21 42:4 62:16
 64:8 91:16
policy 11:21 12:8 13:9
policymaking 59:8
population 30:2
position 59:9
possibly 19:11
post 57:17
post- 57:15
post-'95 53:3 55:12
 57:17 60:12
post-1995 58:14,21
posted 7:12 8:4
potential 65:10
potentially 69:18
PowerPoints 88:14
practical 72:15
practicality 72:18
pre-'95 60:12
pre/post-artificial 60:17
precedents 92:14
prepare 32:15,16
prepared 8:13 9:4,11
 94:7

preparing 5:12 42:18
presence 57:15
present 2:3 6:1 40:15
 73:14
presentation 10:19
 67:5
presiding 1:14
pressure 35:19
presume 11:17 54:17
presumed 53:19
presuming 39:20
presumption 20:10
 38:6 48:15 50:8,11,15
 50:19 51:2 55:10 84:7
presumptions 3:20
 37:1,9,16 38:1,1 49:2
 49:22 50:5,6,7,22
 92:9,15,22 93:12
pretext 90:14
pretty 13:3 21:8 24:17
 28:14 43:3 46:7,11
 52:4 55:15 64:9 74:14
 76:6
previously 38:8
primary 16:9
prime 56:8
prior 32:3
priorities 12:19
probability 29:16
probably 7:13 20:2 22:9
 23:16 26:18 27:16
 31:17 34:13,15 50:1
 51:7 55:9 59:13 62:3
 76:16 86:22
probative 22:2 23:13
 52:9 77:16
problem 7:18 50:6
 76:21 80:19
problematic 75:4
procedure 3:14 21:5,22
 39:12
procedures 86:14,18
 86:20 87:3,4,9,12,19
 88:6,17
proceed 73:4
process 13:22 15:4,5
 20:11 23:3 24:14
 25:19 26:11,17,19
 28:6 29:10 35:14
 39:22 40:19 42:4 43:6
 49:7 51:1 59:8 60:16
 61:18 63:10 65:14
 66:2,20 67:3 73:15,16
 74:5 76:15,16 78:1,2
 79:1 84:20 86:15
 88:21 92:22 93:9,12
processed 25:16 39:11
processes 49:15

processing 39:13 91:5
 91:11
produce 27:4 30:19
 34:21
produces 78:10
product 27:5
production 46:9 47:1
professional 87:17,20
profiles 62:19 79:12
program 21:10 37:20
 37:20,21 44:20 45:21
 45:22 47:1 48:2 62:21
 69:5 77:13 78:8 79:16
 80:21 81:8,12 87:16
 93:14
Programs 44:12
progress 60:15
proportion 20:6
propose 42:2 82:19
prostate 16:18
prove 52:22 83:2
provide 12:2,7 44:8
 56:5 58:16,18,20
 84:10,11,17
provided 7:15 9:17 11:7
 56:12 59:12 74:13
public 6:17 8:3,5,12
 9:19 18:4
publicly 9:20
publicly-available 7:10
 19:13
publish 7:14
published 9:8 59:21
 66:11 77:3
publishing 9:11
pull 24:22 28:20 48:8
 52:14
purpose 62:2 79:10
pursue 71:9
put 49:21 55:21 64:2
puts 52:8 77:14

Q

quality 63:21 85:10
 87:21 92:1
queried 58:12
question 19:18 26:1
 36:21 42:20 45:1 66:5
 79:19 81:1 84:4
questionnaire 14:6
 21:10 43:12,21 45:3
 46:2 51:22 87:7 91:21
questions 10:21 13:9
 17:22 25:12 35:14
 51:17 59:16 61:9 66:7
 76:2 82:15
quickly 13:9 77:18 90:3
 90:18

Quinn 45:20
quite 34:10 45:16 53:14
 74:17 75:3 76:1,6
 87:16
quote 71:12,15 76:5

R

Rachel 18:2 26:8
rad 56:18 65:3
radar 58:6
radiation 38:19 39:4
 87:15
radiation- 75:12
radiation-related 75:8
raise 68:2
raised 87:14
raises 36:20
rare 29:16 74:2,9
rate 51:18
read 61:21
reality 37:21
really 14:13 16:8 21:18
 22:16 25:8 26:2 27:17
 27:17 31:15 33:20
 38:2 41:13 43:3 47:10
 49:14,17,19 58:6
 61:14,15 68:9 72:11
 77:19 78:3 79:3,7
 84:3 90:1 92:7 94:9
reason 56:10,14 74:17
 77:13 90:15
reasonable 11:17
reasons 90:11 91:6
receive 90:8
recommend 66:18,20
 71:8 81:19 85:22
recommendation 86:3
recommendations
 11:10,18 12:22 17:15
 46:15 51:5 60:11
 63:14 66:16 72:13
 73:2 77:20 82:13,18
 82:22 91:14
recommended 11:16
 17:17 62:18 64:3 79:6
recommending 80:2
record 8:20
recording 9:2
records 43:17,19
reference 30:17
referenced 59:7
referral 22:15
referred 74:21
regard 42:17 43:1 44:9
 72:9 74:20 90:11 91:6
regardless 52:8 68:1
Register 34:15
regulations 9:7

reinforce 21:21 22:3
reinventing 51:4
rejected 65:13 89:21
 90:10
related 23:1 24:21
 26:16 38:8 50:18
 72:17 75:13 84:2
relationships 55:11
 83:15
relatively- 61:6 74:8
reliant 87:16
relied 63:7 64:19
rely 21:17 78:21 80:8
 80:11
remember 19:19
remind 8:15 9:15
remotely 7:17
repeat 67:22
repeating 24:4 61:22
 68:10
report 4:5 11:15 13:2
 16:2 19:9 44:5 51:14
 60:22 61:7,21 65:21
 67:7 69:17 78:10
 81:19
reported 14:8,9 23:12
reporting 40:12
reports 62:20 72:13
 83:4
representative 40:17
 41:2
representatives 21:16
represented 25:20
represents 58:2
request 16:16 24:22
 31:7,16,20 34:7,20
 71:10 86:6 88:10,12
 88:13,22 90:12 93:21
requested 51:11
requesting 53:7
requests 10:20 16:15
 31:17 34:1,19 35:15
 56:6 91:8 92:3
require 71:9
required 71:21
requires 34:14
requiring 63:4
resolved 10:22
Resource 43:14 45:7
 47:20 87:1,5,10
resources 71:9,21
 72:16
respond 34:1
responded 11:19 58:15
response 94:5
response/linkage
 12:16
responsibilities 65:7

68:20
responsibility 35:4
rest 27:10 35:7
result 65:9
results 57:22
review 3:6,8,8 10:18
 11:5 25:1,5,7 34:2
 35:16 39:8,8 45:17
 51:11 62:15 63:3 64:1
 65:7,11,18,20 66:2
 68:11,15,17 70:12
 73:16 76:11,18 77:17
 80:6 81:7 84:20 85:10
 85:13,15 90:4,21 93:4
reviewed 16:16 22:7
 23:9
reviewing 23:18 28:4
 39:7 61:21 63:5
reviews 28:5 63:2 74:15
 74:22 75:20 78:10
revise 52:6
revision 65:1
revisions 70:11
Rhoads 2:6 3:4,9 5:3,4
 5:19,22 6:2,4,6,8,12
 19:21 20:19 21:2
right 14:7 17:3 24:9
 32:18 34:14 45:12
 47:17 49:16 50:13
 53:2,5 54:4 55:1 57:5
 57:6 64:10 65:17
 66:10 72:11 75:1
 76:22 77:20 81:5,13
 83:10 85:11 92:3 93:2
 93:19
risk 44:10 63:8
Rocky 41:7
role 3:18 23:18 24:6
 28:3
roll 5:14
Rosie 82:6,8
roughly 31:2
round 31:5 34:17

S

S 1:20
safe 54:18 59:21,22
sample 28:21 30:9
 38:16,19 65:18 85:14
samples 56:13
sampling 39:7 56:11
 86:13
saw 27:2 53:7
saying 16:9 18:13
 19:14 24:4 38:15 49:8
 49:18 59:18 71:4
 77:12 80:12 82:12
 83:8 86:12

says 21:8 36:20 37:19
 54:1,16 66:17 70:7
 84:14
schedule 32:1 94:2
scheduled 6:12 8:3
 34:11
science 93:12
scientific 1:16 78:16
 93:9
scope 3:10 11:1 13:16
screen 6:21
screening 80:20
script 87:5,7 91:21
scrutiny 93:11
SEC 56:8
second 42:2
SECs 56:17
see 7:5,8 10:11 12:5
 14:5 17:16 20:16,22
 24:2 26:10 27:17,19
 30:2 31:10 33:20 35:5
 35:9 38:7 41:16 43:9
 45:13 48:9,21 50:2
 59:3 60:2 65:18 75:3
 79:3 82:17 83:20
 85:19 86:7 87:7 89:15
 92:2 93:22
seen 18:20 23:8 42:13
 42:22,22 43:22 44:19
 48:18
sees 14:2 16:22
select 41:2
selecting 34:18 35:4
self-referral 82:1
Selvin 77:6
SEM 5:8 10:3,16 11:6
 11:12 12:18,20 13:1,8
 13:20 14:4,10,11,17
 15:7,16,21 16:3,4
 17:5,9,13,19 18:14,14
 19:3 20:11 21:12,17
 22:1,13 23:1,11,13
 41:15 45:15 47:22
 48:6,8,11,12,21 49:10
 49:17,18 52:14,14
 53:2 55:4 56:17 61:11
 61:13 62:12 63:13,22
 64:2,6,22 65:1,8,13
 66:1 68:11 70:11
 73:20,20 74:4 76:14
 76:19 83:15 84:5,6,17
 85:9 86:4
SEM's 16:5
SEMs 18:3,22 19:8
 37:22
send 33:22 35:15 36:7
 36:8 59:16 60:3 89:16
 93:5
sending 83:17
sense 25:9 29:22 39:12
 50:1 54:15 60:18 71:3
sent 10:10
September 32:8,13
 33:1,17 35:1 36:9
 90:5 94:3
session 7:21 8:3
set 12:19 50:21 64:6
 71:18 73:6 82:18
sets 92:13
setting 44:3
share 9:4
shared 9:20
sharpening 60:16
sheet-metal 48:3,19,21
short 5:14 17:20 29:21
 61:6 93:10
short-term 74:2
shorter 33:13
show 16:20 18:14 21:12
 33:10 40:18 57:22
 84:1
showing 21:19
shows 54:21
side 18:12 26:9 39:4
 41:11 47:1 87:15,15
significant 84:14
similar 27:1 38:18
simple 81:1
simply 7:3
single 78:11,15
site 1:5 5:8 22:12 23:2
 38:21 39:1 49:15 57:1
 89:21 90:9
sites 18:21 19:2,8 22:9
 41:3,6,15,20 42:15
 47:4,12 53:12 56:1,16
 58:17 63:16,17,18
 89:20
six 34:14 56:13 75:1
 77:9
skip 36:17
sky 72:3
slides 85:19
small 41:15 42:12
smaller 19:3 90:19
smoother 20:12
so-and- 48:9
somebody 18:12 77:14
 79:14
someplace 21:13
somewhat 37:16 61:13
soon 7:14
sooner 9:8
sorry 39:17 58:9 61:2
 64:10 66:10
sort 32:19 67:17 72:11

76:15 80:5 81:7 86:14
sounds 23:22 25:6 89:2
source 21:15 64:1,22
 91:19
sources 21:18 23:9
 62:17 64:18 65:4,11
 67:2 77:15 78:1 79:6
 79:21 83:9,12 88:16
speak 8:16
speaking 8:17
special 9:18 18:21
specific 10:20 11:21
 12:10 13:8,10 19:12
 20:7 21:12 25:1,12
 35:19,20 45:14,15
 50:10 55:10 59:14,16
 59:20 61:9 62:20
 63:14 64:8 73:20
 75:10 91:8 92:2
specifically 12:6 18:2
 30:13 37:22 58:19
 62:21 86:20 88:15
 90:13
specifics 37:18 38:8
spend 70:6 81:16
spreadsheet 25:20 27:2
 27:12 33:16 35:5,8,22
staff 37:7
standard 53:20
standards 55:18
start 8:18 24:8 40:16
 50:17 56:4
started 90:2
starting 12:6
state 8:19
statement 10:17
statements 79:8
STATES 1:1
statistics 27:19
step 40:8
Steve 17:3 23:20 24:10
 24:11 29:3 30:15 32:9
 36:2,14 37:14 41:18
 42:11 46:21 49:13
 54:5 59:2 60:5 67:8
 67:20 72:12,19 75:21
 76:20 78:7 85:2 86:15
 88:9 89:2 92:5
Steven 1:20 4:4 6:6
 15:19 28:3 34:8 37:12
 57:7 71:3 78:4 82:16
 89:18
stimulate 44:17
stratified 28:21 30:9
 38:16,19 39:3 41:1
stratify 38:21 39:1
strong 62:2
structure 42:7 71:21

struggle 78:15
studies 69:8,9,10,11
 83:4,7
stuff 18:20 70:11 92:10
Subcommittee 1:5,13
 3:6,8,17,17 5:7 6:20
 7:15 8:11 10:3,5,12
 10:14 11:14 14:18,19
 28:1,2,7 31:4,4 32:13
 67:14,17 82:10 89:4
Subcommittee's 3:11
 8:7 13:16
submit 36:22
submitted 7:11
substance 62:4 86:21
substance- 62:19
Substances 1:3 5:7 7:4
 10:2
substances/disease
 65:12
sufficiently 79:17
suggest 34:18 40:9
suggested 17:11 28:4
 30:8 65:10
suggesting 65:19
suggestions 11:2
summarize 51:15 61:3
 89:14 90:18
summary 51:16 61:6
supervision 80:6
supplement 90:21
supplemental 65:3
support 83:6
supposed 13:20 42:15
 50:7 53:3 56:11
sure 5:15 14:11 20:1,8
 27:18 29:7,11 30:11
 38:6,10 46:5 59:4
 64:1 67:3 78:21 89:17
 89:21 92:3
surveillance 80:21
synthesis 82:16
system 50:11
systematic 42:6 62:14
systemic 65:20

T

TACs 14:9
take 14:13 16:3 19:2
 24:16 28:22 32:15
 34:21 35:3 37:10 54:7
 66:13 78:19 92:8
 94:10
talk 13:14 32:22 81:14
talked 51:10 56:16
 89:17 93:22
talking 18:15 19:22
 58:4 70:7 78:18 92:21

task 43:2,3 45:10 46:7
 46:11 47:10 70:22
 94:12
tasks 44:9 45:14,15
 57:20 61:16 64:13
 68:9 69:1,22 70:8
 71:5,19,20
TCE 74:16,19
teleconference 5:5
 8:14 94:18
telephonically 1:13
tell 11:13 27:10 48:18
 53:16 59:13 63:21
 79:15 86:17
telling 85:21
tells 84:12
ten 50:2
tended 67:1
tends 62:9
terms 16:20 71:4 91:9
textbook 76:7,14 77:3,9
 77:14
textbooks 62:8 76:22
 77:8
thank 6:11 10:6 36:5
 37:4 94:6,15
thanks 10:7
theory 84:16
thing 22:9,17 35:17
 48:16,16 49:13 55:2
 55:12 83:13 87:4,13
things 13:19 14:8 15:18
 22:5 24:2 51:18 52:19
 53:7 57:1,4 61:20
 68:19 73:6,9 74:3
 77:18 81:16
think 10:21 11:1,17
 12:22 14:12,16,22
 15:10 16:10,22 17:2
 17:20 19:21 21:20
 23:7 24:11,13,15,16
 25:1,13,20,22 26:5,6
 26:8,15 27:22 28:10
 28:20 32:20 33:20
 34:8,16 35:8,10 36:12
 37:19 38:9 39:1 40:5
 40:8,13,19,22 41:1,3
 41:10,12 44:6,17,18
 44:22 45:3 46:7,13
 47:8,20 48:15 49:2,5
 49:6,7 51:14,17,22
 52:1,16 54:16,19,22
 57:14 58:3 60:15 64:7
 65:16,21 66:4,5,9,15
 66:22 67:10,14 68:3
 69:20,22 70:1,6,14,19
 72:3,10,16,21 73:9,19
 76:9,16 77:11 79:14

81:6,14 82:16 86:1,5
 86:12 87:13,15,18,19
 88:5,7 89:11,22 90:20
 92:7 93:22
thinking 39:21 67:12
 92:12
third 12:17 13:1 36:9
 64:5
thought 13:13,14 15:10
 17:5 27:14 28:13 33:3
 37:12 39:17 61:22
 77:21 82:4
thoughts 14:14,19 20:6
 28:11 51:21 57:8 94:4
thousands 27:6,6 81:9
three 22:18 31:3 33:12
 34:6 62:16 77:8
throughputs 67:18
tightened 20:9
time 1:13 5:11,13 6:13
 32:7 34:14 43:22 51:9
 56:1,22,22 57:2,18
 66:14 70:6 74:6 77:2
 77:3,10 93:13
time-consuming 26:12
 70:9
timeframe 20:18 22:12
 34:5 55:6
timeframes 55:8
timeline 4:9 31:22
timely 80:10
times 44:16 50:21
 52:10 55:21
timetable 30:16 34:17
tired 82:11
titles 47:4
to-do 19:20
today 5:13 6:14 8:3,14
 9:7,22 10:22 13:18
 33:6
today's 5:5,10 7:8,9
 8:13 9:5
told 82:15
top 12:6 33:12 50:2
topic 3:11 13:17 82:11
topics 78:4
total 81:8
totality 15:1 24:13
 28:15
totally 17:14 40:21
 41:13 70:4
touch 94:16
tox 62:18 79:12
toxic 1:3 5:6 7:4 10:2
 19:16 58:21 65:12
 86:21
Toxicology 62:20 69:5
 77:13 79:16

toxins 12:9 19:13 61:16
 71:13 73:21
trades 45:22 56:9
trained 43:7,8
training 45:8 85:20 86:6
 88:14 91:10
transcriber 8:16,22
transcript 8:12 53:8
 89:13
transcripts 8:9 9:12,13
transparent 66:2
Trish 45:20
true 57:13
truer 85:15
truth 50:21 51:3 58:1
try 19:4 26:3,16 34:8
 41:1 44:12 79:5 83:1
trying 15:11 19:15
 37:17 49:10 60:7 74:4
turn 10:4
two 18:3 19:10 22:20
 31:2 33:14 34:11 48:6
 59:6,9
two-and-a- 18:8
two-hour 6:14

U

U.S 43:18
Uh-hum 68:7
underestimating 47:15
understand 8:17 39:22
 40:6,20 42:3,4,7
 53:15 79:5 92:12
understanding 31:9
 67:18 92:16
understands 49:15
understood 26:17
unit 80:4,9 81:15
UNITED 1:1
up-to-date 76:1 84:3
update 76:21
use 10:9 14:4 16:5
 17:12 19:12 21:9,9
 28:5 44:13 60:9 78:7
 80:11 85:22 93:12
useful 33:18 35:1 39:1
 61:22 79:10 83:9,12
 86:12
uses 18:4

V

VA 78:9
valid 52:13
Vance 45:21
various 24:5,7 47:4
verbatim 9:11
versus 41:8 76:7 88:2
view 28:8 37:10

viewing 7:21
visited 7:6
Vlieger 2:4 6:8,11 35:10
 42:19 43:11 52:7 53:5
 53:16,22 54:10 58:9
 59:5,15 60:3 82:21
voted 8:10

W

wait 66:12 67:15,16
 72:21 77:13
waiting 30:19 73:5
want 10:9 12:7,11 14:5
 20:8 24:3 26:2 27:10
 29:10 30:16 31:10
 32:6,16 33:7,8,11
 34:8 36:16 38:17
 41:16 47:2,3 50:15
 51:11 56:4 57:7,18
 63:15 69:21 71:12
 82:9 89:22 91:12,20
 92:22
wanted 10:13,18,22
 33:20 37:3 47:15 61:9
 80:18 91:18
wants 94:10
War 57:3
wasn't 23:12 53:6,19
 57:2
way 11:3 12:2 14:2,7,12
 17:6 21:21 23:15 25:9
 31:20 33:14 39:11
 40:5,20 41:19 46:19
 49:14 56:19 64:17
 69:3,4,19 72:15 73:9
 73:19 79:11 80:1,22
 81:18 84:20 93:4
ways 17:19 26:11 49:4
 54:9 57:20 63:19
we'll 94:16
web 7:9
WebEx 6:21 7:20 9:4
 12:3
website 3:8 6:18 7:1,7
 7:16 8:5 9:6,14 11:8
 86:18 88:18
week 20:2 36:9
weeks 31:6 34:6
weeks' 34:14
weigh 69:11
weigh-in 58:7 68:15
 70:2
Welch 1:13,20 3:6,13
 3:15,18,21 4:2,6,8,10
 5:16,18 10:4,6 15:9
 17:2 19:6 20:3 21:1,4
 23:6 24:9,20 26:5
 27:9 28:16 29:2,19

31:12,15 32:11 33:2,5
 35:3,13 36:5,15,18
 37:4,7 38:4 39:15,19
 40:9 41:12,21 44:21
 45:19 46:6,13 47:5,17
 49:5 50:14 53:2,13,18
 54:4,14 57:5,13 58:8
 58:22 59:11 60:1,19
 61:1,5 67:13 68:7
 70:4 72:1,5 73:8 75:1
 75:5,16 76:9 77:1,5
 79:4 80:15 81:6,22
 82:5,8 83:13 85:7,11
 85:17 86:5 88:8 89:3
 89:8,11 90:22 91:7
 92:19 93:3,19 94:6
welcome 5:5
well-established 62:9
well-known 78:14
well-trained 47:11
well-worn 69:12,14
went 25:5 31:18 56:10
 56:14
weren't 18:13 54:2,8
wheel 51:4
whichever 88:20
Whitley 2:2 5:22 6:1
 15:14,14 47:19,19
 50:13 85:18
willing 53:9
wonder 87:9,17
wondering 32:17 42:14
work 5:12 11:1 13:4
 20:12 24:2 25:14 27:8
 27:10 33:20 41:9
 47:12 48:3,13,20 52:1
 54:17 57:20 58:11
 68:18 72:9 93:20
work-intensive 70:18
work-related 30:6
worked 22:8 45:11 48:9
 48:22 63:16
worker 1:3 5:7 7:4 10:3
 21:10 22:11 23:12
 42:15,17 43:7,13,14
 43:20 44:9,12 45:18
 47:1 48:1,3,19,22
 49:17,19 52:4,8,21
 54:1 63:16 81:8 84:16
 91:22
worker's 43:17
workers 21:16 44:13
 52:20 54:12 55:3
 56:13 57:18 59:21,22
 74:8
workers' 58:2
workflow 50:4
working 20:20 21:3

works 39:22
worksheet 64:20
World 69:3
worth 61:22
Worthington 53:9
 58:12
wouldn't 51:3 63:4
 66:19
write 34:19 93:21
writes 83:6
writing 49:7
written 6:17 10:20
 88:16
wrong 55:16 83:22

X

X 18:13

Y

years 77:7 78:11
years' 77:9
yes/no 50:12

Z

ZEEP 38:9,20

0

1

1 1:5 3:3 16:16 62:5
 76:12
1:00 1:13 6:13
1:05 5:2
10 3:6 4:9
100 15:15
11 1:10
13 3:10,12
17,000 73:20 78:18
18th 31:2
1993 66:9
1995 4:3 54:17 55:18,22
 57:8
19th 31:1,2

2

2 3:6 86:19
2-0700 86:21
2:53 94:17
20 40:14,15 71:15
20-odd 16:17 71:12
2005 78:22
2012 66:12
2013 66:10,11
2016 1:10
20th 32:13
21 3:14
22 3:17
26th 8:10

28th 8:10

3

3 3:8
3:00 6:13
30 9:14
36 3:20

4

4 3:10 13:13 21:5
43 4:1
4400 56:13
4a 3:12
4b 3:14
4c 3:20 36:17

5

5 3:3,17 27:22 28:1
50 25:5 32:15
54 4:3

6

6 4:1 36:11
60 4:5

7

7 4:3

8

8 3:8 4:5
81 3:20
83 4:7
84 56:9

9

9 4:7 12:1,3 71:11
90 9:6 56:9
90th 9:9
94 4:9
95 57:16 58:17 60:18

C E R T I F I C A T E

This is to certify that the foregoing transcript


In the matter of: Subcommittee on Site Exposure
Matrices (Area 1)

Before: Toxic Substances and Worker Health Adv. Bd.

Date: 07-11-16

Place: teleconference

was duly recorded and accurately transcribed under
my direction; further, that said transcript is a
true and accurate record of the proceedings.



Court Reporter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701