

IN THE CIRCUIT COURT OF THE 11th JUDICIAL CIRCUIT
IN AND FOR DADE COUNTY, FLORIDA
GENERAL JURISDICTION DIVISION

JOSEPH MALLIA, and GALE
MALLIA, his wife,

Plaintiffs,

vs.

BENNETT AUTO SUPPLY, et
al.,

Defendants.

No. 04-16237 CA 42

VIDEOTAPED DEPOSITION OF

DENNIS J. PAUSTENBACH, PH.D., D.A.B.T.,
taken on behalf of Plaintiffs at 201
Second Street, Suite 1800, San Francisco,
California, beginning at 9:10 a.m. and
ending at 6:52 p.m., Friday, July 1,
2005, before MARY F. NELSON, Certified
Shorthand Reporter No. 3553.

APPEARANCES

For Plaintiffs:

THE RUCKDESCHEL LAW FIRM LLC
BY: JONATHAN RUCKDESCHEL
Attorney at Law
1635 Webster Street
Baltimore, Maryland 21230
443-286-8858

For Plaintiffs:

DAVID M. LIPMAN, P.A.
BY: REBECCA S. SHULL
Attorney at Law
5901 S.W. 74 Street, Suite 304
Miami, Florida 33143-5186
305-662-2600

For Defendants Ford Motor Company and General Motors:

THELEN, REID & PRIEST LLP
BY: PAUL V. LANKFORD
101 Second Street, Suite 1800,
San Francisco, California 94105-3601
415-371-1200

For Defendants Ford Motor Company and General Motors:

SALAS, EDE, PETERSON & LAGE
BY: HENRY BELL
Attorney at Law
6333 Sunset Drive
S. Miami, Florida 33143
305-663-0000
Telephonic Appearance

For Defendant Bennett Auto:

CLARKE, SILVERGLATE, CAMPBELL,
WILLIAMS & MONTGOMERY
BY: CRAIG SALNER
Attorney at Law
799 Brickel Plaza, Suite 900
Miami, Florida 33131
305-377-0700
Telephonic Appearance

1 For Defendant Mack Trucks:

2 HOLLAND & KNIGHT
 3 BY: THOMAS BURKE
 4 Attorney at Law
 5 200 S. Orange Avenue, Suite 2600
 6 Orlando, Florida 32801
 7 407-244-1145
 8 Telephonic Appearance

9 For Defendant Pneumo Abex:

10 LAW OFFICES OF BEN GIRTMAN
 11 BY: BEN GIRTMAN
 12 Attorney at Law
 13 1020 E. Lafayette, Suite 207
 14 Tallahassee, Florida 32301
 15 850-656-3232
 16 Telephonic Appearance

17 Also Present:

18 THE HONORABLE HERBERT KLINE
 19 Special Master
 20 Telephonic Appearance

21 Also Present:

22 JENNIFER S. PIERCE, M.S.
 23 Associate Health Scientist
 24 ChemRisk
 25 25 Jessie Street, Suite 1800
 San Francisco, California 94105

Also Present:

DONOVAN BAUER
 Videographer
 Esquire Deposition Service

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1 San Francisco, California, Friday, July 1, 2005

2 9:10 a.m. - 6:52 p.m.

3
4 DENNIS J. PAUSTENBACH, PH.D., D.A.B.T.

5 having been first duly sworn, was examined and
6 testified as follows:

7
8 EXAMINATION

9 BY MR. RUCKDESCHEL:

10 Q Good morning, Dr. Paustenbach. My name is Jon
11 Ruckdeschel. I represent Joe Mallia in this case.

12 (Plaintiffs' Exhibit 1 was marked for
13 identification by the court reporter.)

14 BY MR. RUCKDESCHEL:

15 Q I've placed in front of you what has been
16 marked as deposition Exhibit 1. It is a notice of
17 today's deposition. Have you seen that document
18 before?

19 A Yes.

20 Q And attached to Exhibit 1 is a schedule of
21 documents that were requested to be produced and I'd
22 like to walk through these and ask you whether you have
23 produced the documents for each number. I don't want
24 to ask you anything about them. I want to ask if you
25 brought them. Have you brought No. 1, your CV?

1 A Yes.

2 Q And No. 2, documents relating to this case?

3 A Yes.

4 Q Does that include correspondence regarding
5 this case?

6 A Yes.

7 Q Have you brought a list of prior cases in
8 which you testified as an expert?

9 A I don't know.

10 Q Can you explain that to me?

11 A I don't know if I brought it or not. I'd be
12 happy to provide it.

13 Q All right.

14 A Normally there is a restriction on the time.
15 They usually have a four-year limit. Yours is
16 seemingly infinite.

17 Q It is.

18 A I was surprised to see that. You need to tell
19 me what you need and I'll be happy to give it to you.

20 Q There were objections to the deposition and
21 the judge made a ruling and his ruling was the
22 protective order was denied with regard to the
23 materials in your deposition notice. So in other
24 words, the judge has ruled that the orders, I'm sorry,
25 the documents are to be produced.

1 A Really?

2 MR. LANKFORD: I'm not sure that's the scope of
3 the order as I understand it, and I actually did read a
4 copy of it. However, obviously, the parties are going
5 to produce what there obligated to produce by the court.

6 BY MR. RUCKDESCHEL:

7 Q Do you have any list of prior cases with you?

8 A I don't know. But like I said, I'll be happy
9 to provide it. It's not a problem for me.

10 Q Have you provided such lists in the past in
11 depositions?

12 A In the federal court cases I'll provide a
13 four-year requirement that is expected.

14 Q And at times has your CV contained attachments
15 that included lists of cases that you had testified in
16 as an expert?

17 A At one point it did, yes.

18 Q And when it did was the list accurate?

19 A Sure.

20 Q To the best of your knowledge was the list
21 complete?

22 A When it did I think it was complete, yes.

23 MR. RUCKDESCHEL: Okay. Just so that the
24 record is clear, let me go ahead and mark as Exhibit 2
25 in this deposition, and I don't need to show it to you,

1 Dr. Paustenbach, unless you'd like to see it, a copy of
2 the judge's order regarding the motion for protective
3 order.

4 (Plaintiffs' Exhibit 2 was marked for
5 identification by the court reporter.)

6 BY MR. RUCKDESCHEL:

7 Q Let's move forward to No. 5 if you're done
8 with that document, Doctor. Have you brought with you
9 documents reflecting payment regarding this matter?

10 A I don't know. I think the lawyers were going
11 to assemble that for you.

12 MR. RUCKDESCHEL: Okay. Counsel, do you know
13 if those documents are present? No. 5?

14 MR. LANKFORD: In terms, I believe that
15 documents have been produced to your office regarding
16 billings and the documents speak for themselves in terms
17 of this.

18 MR. RUCKDESCHEL: The documents that have been
19 produced regarding billings do not reflect payment in
20 this case. And so I would request that those documents
21 be produced while we're here at the deposition so we can
22 have a copy of Dr. Paustenbach's bills or any documents
23 that relate to billings in this case.

24 MR. LANKFORD: Again, we'll produce what we're
25 obligated to produce under the order of the court and

1 within a reasonable period. And this order was signed
2 yesterday.

3 MR. RUCKDESCHEL: Counsel, why don't we go off
4 the record.

5 THE VIDEOGRAPHER: Off the record. The time is
6 9:15.

7 (Discussion off the record.)

8 THE VIDEOGRAPHER: Back on the record. The
9 time is 9:17.

10 BY MR. RUCKDESCHEL:

11 Q Doctor, so the record is clear, it's my
12 understanding that you do not have with you No. 4 or
13 No. 5?

14 A To the best of my knowledge I don't.

15 Q Okay. What about No. 6?

16 A I understand that those have been produced to
17 you so I didn't bring them today.

18 Q The documents produced by General Motors
19 regarding payments to ChemRisk have been redacted and
20 let's be clear for the record. You have not brought
21 them with you today; is that correct?

22 A Right. For the reason I said. I was told they
23 were already delivered.

24 Q What about No. 7. The copies of publications
25 authored all or in part by you?

1 A I didn't bring all of these because I was
2 frankly, didn't think that's what you really wanted.
3 You wanted all 300 publications or did you want those
4 related to this case?

5 Q No, we requested all 300 publications.

6 A I'm happy to share them with you.

7 Q Okay.

8 A If that's what the court says I should do I'd
9 be happy to share them with you.

10 MR. LANKFORD: Let's go off the record for a
11 second.

12 THE VIDEOGRAPHER: Off the record. The time is
13 9:18.

14 (Discussion off the record.)

15 THE VIDEOGRAPHER: Back on the record. The
16 time is 9:21.

17 BY MR. RUCKDESCHEL:

18 Q Thank you. Doctor, we've been off the record
19 for a minute and there has been some discussion between
20 counsel and between you and I, and it's my
21 understanding that as long as there is no objection
22 from counsel for General Motors and Ford that you are
23 willing to provide copies of the publications in No. 7?

24 A If there is no objection and the judge says
25 it's appropriate I'd be happy to.

1 Q Okay. Have you brought with you No. 8,
2 studies and publications upon which you rely in this
3 case?

4 A Yes.

5 Q And can you or someone here get those out for
6 me, please?

7 A Sure. Do you want that done right now? Do you
8 want them on the table, Counsel?

9 Q No, that's fine. My colleague here will take
10 a look at those.

11 A Okay.

12 Q No. 9 requested documents produced at the
13 July 4, 2004 deposition in the Addison versus AC&S
14 case. Those were your reliance documents that were
15 provided by Ford and others. Have you that those with
16 you today?

17 A Yes.

18 Q Okay. Have you brought with you any documents
19 relating to the hiring of ChemRisk by General Motors
20 and Ford?

21 A There are no such documents.

22 Q There is no contract or agreement between Ford
23 and ChemRisk?

24 A That's correct.

25 Q And none between and General Motors and

1 ChemRisk?

2 A That's correct.

3 MR. LANKFORD: Just so it's clear, I'm not sure
4 what we said on the record and off the record. But with
5 respect to the objections raised to the notice, you
6 know, the position of the companies is that they will
7 comply with the final order of the court.

8 And with respect to the order of the court it
9 is at this point unclear at best what the position of
10 the court is with several of these document requests.
11 And we're not waiving any objections previously raised
12 with respect to those document requests. And I'm just,
13 you know, making the record. We can deal with it down
14 the road. But, you know, obviously a number of the
15 items have already been produced to you, and in addition
16 the order was just issued yesterday and various of the
17 documents requested.

18 You know, essentially the one-day notice
19 doesn't provide adequate time to determine the scope of
20 what is available and produce it. But again, we'll
21 allow Mr. Bell's office to deal with the issue with
22 respect to what will be produced pursuant to the court
23 order and meet and confer process with plaintiffs'
24 counsel.

25 MR. RUCKDESCHEL: Counsel, when you say "we"

1 who is "we"?

2 MR. LANKFORD: Ford and General Motors.

3 MR. RUCKDESCHEL: And to clarify the record, I
4 strenuously dispute your characterization that various
5 of these documents have already been produced. They
6 have not.

7 MR. LANKFORD: Well, I'm saying we have a
8 roomful of documents here.

9 MR. RUCKDESCHEL: I understand.

10 MR. LANKFORD: And it's my understanding
11 certain documents have been provided to you in advance.
12 And let me just be clear. I'm not stating, you know,
13 I'm not arguing the issue with respect to what we are
14 and aren't turning over. I'm simply making the
15 statement because I don't want any claims being made
16 down the road that there is some type of waiver in that
17 regard.

18 MR. RUCKDESCHEL: I'm happy to stipulate that
19 your silence is not a waiver on any issue in this case.

20 MR. LANKFORD: Okay.

21 BY MR. RUCKDESCHEL:

22 Q No. 10, my understanding, Dr. Paustenbach, is
23 there are no documents?

24 A Yes, sir.

25 Q For No. 11, have you brought documents

1 responsive to No. 11?

2 A I read that as similar to 10. There are no
3 such documents.

4 Q Okay. That makes it easy. No. 12, documents
5 pertaining to communications between you, Ford, GM and
6 Chrysler about to asbestos, brakes or asbestos disease.
7 Have you brought those documents?

8 MR. LANKFORD: Well, let me object to --

9 MR. RUCKDESCHEL: I'm just asking if he brought
10 them.

11 MR. LANKFORD: Let me also raise the objection
12 with respect to privilege to the extent it calls for any
13 privileged items. And again, that objection is within
14 the -- we'll produce the items within the scope of the
15 court's order.

16 MR. RUCKDESCHEL: Counsel, it's going to take
17 us a long time to finish this deposition if you continue
18 to give these speeches during this process. I'm asking
19 the witness whether he brought these documents. It's a
20 simple question. Let him answer the question. Your
21 objections are properly preserved for the record on all
22 these matters. But we'll get through this a lot
23 quicker.

24 THE WITNESS: I don't have such documents with
25 me.

1 BY MR. RUCKDESCHEL:

2 Q Okay. And No. 13, communications between you
3 regarding --

4 A I didn't bring such documents.

5 Q Okay. No. 14, communications, between you and
6 Ford, General Motors or Chrysler or their attorneys
7 regarding the brake articles? The articles that you
8 bring --

9 A There were no communications so there's nothing
10 to bring.

11 Q Have you brought with you any documents that
12 pertain to meetings between you and Ford, General
13 Motors, Daimler Chrysler or their attorneys pertaining
14 to asbestos or brakes?

15 A I'm not aware of any documents regarding
16 meetings. I assume it means like minutes and things
17 like that.

18 Q Anything that relates to the meetings,
19 minutes, notes, anything like that.

20 A I'm not aware of any.

21 Q Same for No. 16. Have you brought documents
22 about meetings that pertain to the brake articles?

23 A There are none.

24 MR. RUCKDESCHEL: No. 17. Let's go off the
25 record for a minute.

1 THE VIDEOGRAPHER: Off the record. The time is
2 9:27.

3 (Discussion off the record.)

4 THE VIDEOGRAPHER: Back on the record the time
5 is 9:28.

6 BY MR. RUCKDESCHEL:

7 Q No. 17, Dr. Paustenbach, requests you produce
8 documents that relate to any draft or outlines or
9 preliminary version or precursors to the brake
10 articles. Have you brought any such documents?

11 A There are none.

12 Q Are there any retainer agreements, this is No.
13 18, confidentiality agreements or other contractual
14 agreements between Ford, General Motors or Chrysler or
15 their attorneys relating to the brake articles you
16 brought?

17 A Not that I'm aware. If they existed they would
18 have been in the hands of Exponent.

19 Q And for No. 19, any documents?

20 A I read that as the same as 18. Is there a
21 difference?

22 Q It's simply between ChemRisk as opposed to
23 between you.

24 A The articles were written before, and published
25 I think before ChemRisk was operating.

1 Q Okay. It was in existence but it was not
2 operating; is that correct?

3 A Well, ChemRisk is, the corporation has in one
4 form or another been intact for a long time. But let's
5 just say as it exists in the last two years there's not
6 an agreement with anyone regarding the brake articles
7 because they were already nearly published.

8 Q Was there such an agreement before?

9 A As I had said, if there it would be at
10 Exponent.

11 Q Are you aware of any such agreements existing
12 at any point in time?

13 JUDGE KLINE: Hello.

14 MR. RUCKDESCHEL: Hello.

15 JUDGE KLINE: Yes, this is Herb Kline.

16 MR. RUCKDESCHEL: Hi, Judge Kline. Jon
17 Ruckdeschel. I'm here with the witness and others. We
18 are on the record. We're working through the deposition
19 notice. I'm just categorizing with Dr. Paustenbach what
20 documents he has and has not brought and what documents
21 do and do not exist.

22 JUDGE KLINE: Okay. I'll stay on the line
23 until you tell me you don't need me.

24 MR. RUCKDESCHEL: Thank you, Judge.

25 BY MR. RUCKDESCHEL:

1 Q Moving on to No. 20, Dr. Paustenbach, have you
2 what brought documents provided to you by Ford and
3 General Motors that pertain to asbestos, brakes or
4 occupational disease?

5 A I brought some documents, yes.

6 Q Are there documents that Ford, General Motors
7 or Chrysler or their attorneys have provided you that
8 relate to these subjects that you have not brought?

9 MR. LANKFORD: Let me object to it as -- well,
10 it's overbroad and I guess vague. Are you asking for
11 documents that he's been provided in specific cases such
12 as transcripts of testimony from plaintiffs?

13 MR. RUCKDESCHEL: Well, Counsel, I'm actually
14 asking for everything that has been provided to
15 Dr. Paustenbach that is in his possession that relates
16 to asbestos, brakes or occupational disease that was
17 provided by Ford, General Motors, Chrysler or their
18 attorneys. And that's exactly what the request says.
19 So I'm asking the doctor whether he's brought those with
20 him and he said he brought some.

21 MR. LANKFORD: That's right.

22 MR. RUCKDESCHEL: And I asked if there were
23 others that existed that he hadn't brought. And that's
24 when you interjected your objection.

25 BY MR. RUCKDESCHEL:

1 Q So let's go ahead and ask the doctor to answer
2 the question.

3 A There are numerous documents that I would not
4 have because they would be at Exponent, at my former
5 employer. I have quite a number of the depositions and
6 case materials from all the cases I've worked on since
7 I've been at ChemRisk the last two years. I did not
8 bring those. They probably would constitute, I don't
9 know, 40 or 50 boxes maybe of materials. Again, you're
10 welcome to them if the judge and attorneys believe you
11 would like to have them.

12 Q Let's take, and I'm going to define this so we
13 know what we're talking about, what I'll call the
14 case-specific materials, materials about Joe Mallia,
15 for example, in this case, depositions of witnesses
16 that are specific to this case.

17 A Right.

18 Q Medical records that you may have that are
19 specific to this case. And we'll cause those
20 case-specific materials. If we take those materials
21 for this case or for other cases, are there documents
22 that you've been provided, and we exclude those, are
23 there documents that have been provided to you by Ford,
24 General Motors, Chrysler or their attorneys that relate
25 to asbestos, brakes or occupational disease that are

1 not here today?

2 MR. LANKFORD: And let me object to the extent
3 it calls for privileged information that may have been
4 provided to him as a consultant.

5 THE WITNESS: I'm sure there are other
6 materials, the majority of which would be with Exponent.
7 And I understand you're working with counsel to resolve
8 how to answer this question.

9 BY MR. RUCKDESCHEL:

10 Q Are there other materials that you have or
11 that are in the possession of ChemRisk that you've been
12 provided that relate to asbestos, brakes or
13 occupational disease other than case-specific material
14 that aren't here today? And I'm asking if there are
15 some back at the office that didn't come with you?

16 MR. LANKFORD: Same objection.

17 THE WITNESS: It would be very limited if there
18 were.

19 BY MR. RUCKDESCHEL:

20 Q What types of things might there be?

21 MR. LANKFORD: Same objection.

22 THE WITNESS: I would --

23 BY MR. RUCKDESCHEL:

24 Q I'm just asking the types of documents. I'm
25 not asking any specific document. I'm just wondering

1 what types. Is there a category of documents that
2 didn't come with you, is there some cluster of
3 documents that relates to one thing or another that you
4 didn't bring? If so, then I want to explore what those
5 are.

6 Again, Counsel, I understand you may want to
7 raise an objection with regard to privilege. That's
8 why I'm asking about the generic type of information
9 which is what we're entitled to under the Florida rules
10 regarding claims of privilege.

11 A Okay. So I would put them in box categories.
12 One category would be reprints. Okay. So there are
13 certainly other reprints regarding issues related to
14 asbestos that I would have. And whether I got them
15 from Ford, General Motors or Chrysler is unclear. I
16 could have taken them from the library. So there's
17 that box.

18 Q Reprints of published material?

19 A That's right.

20 Q Okay.

21 A And then there is, of course, corporate
22 correspondence which has been disclosed many times in
23 prior cases. And I don't know if I brought them all
24 today but they may all be here, the classic ones. So I
25 have those.

1 And then there are a few other reprints of
2 things like pieces, portions of service manuals or
3 technical bulletins that I may have received from them
4 or I may have received from some lawyer or another
5 consultant. And I didn't know if that fit into this
6 but I didn't think it was that relevant. It was
7 repetitive to what I did bring.

8 So those are the boxes of categories of
9 information not with me. I don't think it's
10 particularly interesting to you but that's what I don't
11 have with me.

12 Q I understand and I appreciate your description
13 of that. No. 21, Dr. Paustenbach, requests that you
14 bring any transcripts, videotapes or recordings of
15 prior testimony in cases that relate to asbestos and
16 brakes, clutches or other automobile parts. Have you
17 brought prior transcripts?

18 A I did not bring all my transcripts from prior
19 cases. I had thought that this was resolved by the
20 attorneys, that this request, I didn't need to comply
21 with this.

22 Q Okay.

23 A I mean I'm happy to. But I thought that had
24 been resolved.

25 Q Okay. We would request it.

1 A It's an unusual request because I didn't know
2 you could make such a request. You're asking if I've
3 been deposed 50 times and been to trial 10 times you
4 want all those transcripts?

5 Q If you have them. If they are in your
6 possession that's what we're asking.

7 A Okay. Whatever the court and you guys have
8 agreed I'll do whatever makes sense. But I didn't
9 bring them today.

10 MR. RUCKDESCHEL: I understand. And Judge
11 Kline, I don't know whether this is a time where we
12 might need your intervention, Counsel, will you provide
13 copies of the transcripts, videotapes and other prior
14 testimony in asbestos cases that are in
15 Dr. Paustenbach's possession? If so, then we don't need
16 Your Honor's intervention, but...

17 MR. LANKFORD: Well, I think that what
18 Dr. Paustenbach stated regarding it being an unusual
19 request and something that I think the inference
20 essentially is not proper, it is accurate. You're
21 asking the parties to provide to you the, all prior
22 testimony of their expert in other matters.

23 It's burdensome, it's not something that the
24 expert is relying on in this case for his opinions, and
25 therefore it's not something which the expert should

1 have to produce within this case.

2 MR. RUCKDESCHEL: I understand your explanation
3 and so let me just clarify for the record, are you
4 saying that you will not produce them voluntarily?

5 MR. LANKFORD: And it's equally available.

6 MR. RUCKDESCHEL: It's not because I don't have
7 the list of prior cases, nor do I have the name of the
8 reporter. But that's neither here nor there. My
9 question is will you produce them. If not I'm going to
10 ask Judge Kline to make a ruling on it. That's it.

11 MR. LANKFORD: We agreed to provide a list of
12 the cases which he provided testimony that he previously
13 described that he states he has created and produced in
14 the past. And counsel then can go and collect the
15 transcripts just as we do with your experts. You know,
16 that would be our position on it, that it's not a proper
17 request, essentially asking us to do your I guess
18 preparation within the case for you in terms of
19 investigation I guess, and in terms of research
20 regarding an expert's prior testimony. And given it's
21 equally available and given those factors, that it's
22 burdensome.

23 MR. RUCKDESCHEL: Judge?

24 JUDGE KLINE: Yes, sir.

25 MR. RUCKDESCHEL: We'd ask request 21(a) in the

1 deposition notice, request that Dr. Paustenbach produce
2 the documents in his possession. So these are documents
3 that already exist that are in one location and they
4 could be copied easily, all transcripts or videotapes of
5 his prior testimony.

6 Obviously we believe this is relevant, prior
7 inconsistent statements are directly relevant and proper
8 cross-examination in this case of an expert. The
9 request is tailored to the issues in this case. It
10 involves only cases involving brakes, clutches or other
11 automobile parts and asbestos.

12 The burden of my going around the country and
13 contacting court reporters to get copies of depositions
14 that exist in one place is obviously greater.

15 JUDGE KLINE: Yes, sir.

16 MR. RUCKDESCHEL: We ask that the court order
17 that be produced.

18 MR. LANKFORD: And just to be clear, I don't
19 think it's been established that the witness is in any
20 way relying upon those items and the scope of what he
21 should be obligated to provide in that regard are items
22 which he is relying upon for his opinions in this case.

23 JUDGE KLINE: Well, I'm sure the plaintiffs'
24 position is I'll never know until I see it.

25 MR. RUCKDESCHEL: That's absolutely right.

1 JUDGE KLINE: Here's what I suggest as a
2 reasonable compromise. Those documents that are in your
3 possession, Mr. -- I'm sorry, Dr. --

4 THE WITNESS: Paustenbach.

5 JUDGE KLINE: -- Paustenbach. Those documents
6 which are in your possession you will make available to
7 the plaintiff to copy. Those items which are not in
8 your possession you will make available a list for the
9 plaintiff, and he can go out and try to get them the
10 same as you would try to get them.

11 THE WITNESS: Judge, I think that's fine. Can
12 I ask you something else?

13 JUDGE KLINE: Sure.

14 THE WITNESS: Formally when this occurs and
15 there is a special master involved somebody says, well
16 Judge, is it okay for the defense counsel to ask the
17 same of all the plaintiff experts. And frankly, since
18 having been through this several times with these
19 plaintiffs' experts they all refuse to do it. So with
20 that in mind I guess I would ask you to ask the same of
21 the plaintiffs' expert.

22 MR. LANKFORD: In fact, Your Honor, that was
23 going to be my next request that it be reciprocal.

24 JUDGE KLINE: Why don't we make it reciprocal?
25 The days of surprise in these cases are over.

1 MR. RUCKDESCHEL: Certainly, Judge.

2 JUDGE KLINE: Therefore, you can do it the hard
3 way or the easy way. Why not do it the easy way and
4 make it reciprocal. What the plaintiffs have in their
5 possession that pertains prior testimony, make available
6 to the defendants for copy. What they don't have, make
7 a list available to the defendant and let them go out
8 and get it.

9 MR. RUCKDESCHEL: Judge, I have no general
10 objection to that except for the fact that the
11 plaintiffs' experts were all deposed months ago and
12 there was no such request made or pushed by any of the
13 defendants. And so if Your Honor is saying at the
14 plaintiffs' expert deposition should they occur here
15 forward, that is a request that the court will honor,
16 then we'll certainly agree.

17 If Your Honor is saying that we now need to go
18 back and ask our experts to go and collect this
19 information when such a request wasn't made months ago
20 at their deposition, I'd ask that the court not reopen
21 that door. I mean they had their chance to make this
22 the request.

23 JUDGE KLINE: Yes, sir.

24 MR. LANKFORD: Well, in terms of the timeliness
25 of the request, it was something there was a motion

1 pending on and that to the extent there was a ruling I
2 guess with respect to the motion, it was yesterday, and
3 obviously the items aren't here, so the witness, given
4 the short time period provided, and so the witness and
5 the parties, frankly or the defendants are being asked
6 to essentially after the fact of the deposition to
7 collect these documents. And we would ask that that be
8 reciprocal and with respect to plaintiff experts.

9 MR. RUCKDESCHEL: And again, Judge, we have no
10 objection to that if they were going to be permitted to
11 take another deposition of our experts and they wanted
12 to make that request I would have no problem complying
13 with it.

14 But if what Your Honor is saying is that they
15 now should serve a belated request for production of
16 materials when discovery closes next Friday I think is
17 not something --

18 JUDGE KLINE: We can do it one of two ways,
19 fellows. You can go ahead and agree to what I said or
20 do it the hard way and have the defendant come in before
21 the judge and seek the same information that has been
22 given to you, Mr. Defendant. Let the judge decide
23 whether or not that is appropriate, or we can just say
24 let's just do it. So far as I'm concerned I think the
25 best way to say it is let's just do it.

1 That's not, you know, this is not something
2 that is pertinent at this deposition. I'm not even sure
3 I have the authority to say go ahead and do it. But if
4 I do have the authority I would require the plaintiffs'
5 experts to do the same thing the defendants' experts are
6 doing, make available to the other side those documents
7 which are in his possession for copying and make a list
8 of those documents that are not in his possession.

9 And that's my ruling. Whether that's
10 enforceable, I'm not sure. But, you know, I have a
11 special purpose here and that is to be available at the
12 deposition. But if I have authority to make such
13 ruling, that's my ruling.

14 MR. LANKFORD: Thank you, Your Honor.

15 MR. RUCKDESCHEL: Thank you, Judge.

16 BY MR. RUCKDESCHEL:

17 Q Dr. Paustenbach, have you brought materials
18 responsive to 21(b), exhibits, PowerPoint presentations
19 or other visual aids that you have used in the past in
20 connection with your testimony in cases relating to
21 disease arising from exposure to asbestos and brakes,
22 clutches or other automobile parts?

23 MR. LANKFORD: We would raise the same
24 objection.

25 THE WITNESS: It's my understanding that this

1 was resolved between you and counsel and I did not bring
2 all those materials.

3 BY MR. RUCKDESCHEL:

4 Q Okay. You have presented PowerPoint
5 presentations and used other demonstrative aids in
6 testimony in asbestos cases before; is that correct?

7 A Yes, sir.

8 Q And you maintain those in some form or another
9 at your offices?

10 A I don't think I maintain them on a per case
11 basis. There would be some of those materials
12 available. They may not be, you know, for that case or
13 for a specific case because I build them for each case
14 specifically. I'm not so sure I would have saved them
15 as intact unit for a case.

16 Q I understand and that's why I said in some
17 form or another.

18 A Yes.

19 Q And will you agree to produce those documents?

20 A As I said, I'll agree to produce whatever
21 lawyers, you all have agreed with the court to produce.
22 But my understanding was this is not something I needed
23 to produce.

24 Q What is the basis of that counsel?

25 A A conversation I had with counsel.

1 Q Which counsel?

2 A Mr. Bell and counsel for Ford and GM.

3 MR. RUCKDESCHEL: Your Honor, I'd ask the same
4 with Request 21(b). Dr. Paustenbach has used
5 demonstrative aids and PowerPoint presentations to
6 support his testimony in cases previously. I think
7 we're entitled to see those before we go to trial in
8 this case, and we'd ask that the court order them to be
9 produced.

10 MR. LANKFORD: And our response would simply be
11 the same, Your Honor, and if the court is inclined to
12 have the same order with respect to the transcripts, we
13 would ask that it simply be reciprocal, and that it be
14 limited to those that are readily available. We don't
15 want to here in the few weeks before trial have to have
16 the witness or expert spend his time going through all
17 his prior case files to find PowerPoint presentations,
18 etc.

19 JUDGE KLINE: Okay, the experts will all be
20 required to make a good faith effort to find those that
21 are readily available and produce them for copying or
22 whatever on the other side, as to both sides.

23 MR. LANKFORD: Thank you, Your Honor.

24 MR. RUCKDESCHEL: And, judge, may I clarify, is
25 this now an obligation that attaches without the need

1 for service of a request or a deposition notice by the
2 defense?

3 JUDGE KLINE: As far as I'm concerned.

4 MR. RUCKDESCHEL: Okay, I understand, thank
5 you.

6 BY MR. RUCKDESCHEL:

7 Q Dr. Paustenbach, with respect to No. 22, have
8 you brought with you responsive documents?

9 A I brought some as listed on my CV but I've not
10 brought everything.

11 Q Okay. What materials have you not brought?

12 A Well, it's a very broad request. As I read it,
13 you wanted fundamentally the PowerPoint presentations
14 and any handouts from any speech I've ever given
15 regarding asbestos and brakes, clutches or automobile
16 parts. That's the way I read it.

17 Q That's correct, and may I ask a clarifying
18 question here. Professionally you didn't start working
19 in the asbestos litigation until the middle of 2001; is
20 that correct?

21 A I think it's about right.

22 Q Okay.

23 A It may be a little before that. But it's been
24 in the recent years.

25 Q And in that time since the middle of 2001, and

1 now the middle of 2005, how many speeches,
2 presentations or other public or private addresses
3 about asbestos brakes, clutches or other automobile
4 parts have you given?

5 A I assume what is meant by this is if I was a
6 co-author, even if I didn't give the speech, that is if
7 it was at a professional conference and a colleague
8 gave it, you're asking for that as well. That's the
9 way I read this.

10 Q That's correct.

11 A And I would say that number is between probably
12 10 and 20.

13 Q Okay. And how many of those did you
14 personally present in whole or in part, the
15 presentation?

16 A I would say six or seven perhaps.

17 Q Can you tell me what those occasions were,
18 please?

19 A I think I can. I'd need my CV.

20 Q Okay, great.

21 A Would you like to do that now?

22 Q Yes, please.

23 A And I have my CV, please?

24 MR. RUCKDESCHEL: For the record we'll mark the
25 doctor's CV as Exhibit 3.

1 (Plaintiffs' Exhibit 3 was marked for
2 identification by the court reporter.)

3 BY MR. RUCKDESCHEL:

4 Q Doctor, if you just refer me to the page or
5 pages where we can find that information. We don't
6 need to go through it on the record.

7 A Okay. It's on Page 52, 53, 54, 55, 56. Those
8 should be the pages that cover all my presentations in
9 the last three or four years. And then the ones that
10 are involving asbestos are in there. It does not tell
11 you which ones I personally gave but it does lists all
12 the times I've done it.

13 Q And you brought some of those materials but
14 not all?

15 A I believe so, yes.

16 Q Could we have the materials you did bring?

17 A I'll tell you specifically, I think these are
18 going to come at lunch time.

19 Q Okay.

20 A Because I asked them to be printed out this
21 morning.

22 Q That's fine, thank you.

23 A Mm-hmm. That's under the assumption I'm to
24 produce them, but they will be available.

25 MR. RUCKDESCHEL: There hasn't been an

1 objection raised, so...

2 MR. LANKFORD: Well, I think there was an
3 objection in form of a motion which hasn't been ruled on
4 with respect to this issue and we just ask it be
5 reciprocal, the same nature as the last two requests.

6 MR. RUCKDESCHEL: Your Honor, this is Jon
7 Ruckdeschel. You have not had the benefit of seeing the
8 motion that was filed. The motion contained absolutely
9 no argument regarding the deposition notice of
10 Dr. Paustenbach other than the broad statement that it
11 was overly broad. As you are aware, that type of
12 objection is insufficient under the Florida rules and
13 Florida law regarding the discovery requests that are
14 made. The motion did not address the substance of the
15 requests made from Dr. Paustenbach, and I'd ask that
16 Your Honor take a look at the motion in connection with
17 this because there are comments being made about there
18 is a motion for protective order being filed, and the
19 protective order did not contain argument containing
20 these subjects.

21 And so I think it's inappropriate to say a
22 motion has been filed and that a motion has addressed
23 the substance of these requests because the motion did
24 not do so.

25 MR. BELL: This is Henry Bell who filed the

1 motion and I would disagree with counsel's
2 characterization of the motion.

3 MR. LANKFORD: And certainly we can make the
4 objection here then if that is the plaintiffs' counsel's
5 position. A request asking for items which the expert
6 is not relying upon for his opinions in this case, there
7 is not a subpoena to the witness, the witness has no
8 obligation to provide items which he's not relying upon
9 for his opinions in the case.

10 He has brought the items he's relying on. Many
11 boxes of items. It's overbroad and burdensome. If the
12 court is inclined to issue the same order as it did for
13 the last two similar requests, we ask it would be
14 reciprocal.

15 MR. RUCKDESCHEL: Your Honor, Mr. Lankford is
16 apparently unfamiliar with Florida law concerning the
17 scope of discovery. The scope of discovery regarding a
18 testifying expert is not limited to materials that the
19 expert is relying upon.

20 MR. LANKFORD: True, but his obligation to
21 bring with him items to his deposition are at best, you
22 know, those which he's relying upon.

23 JUDGE KLINE: What is the argument, fellows,
24 tell me.

25 MR. RUCKDESCHEL: I have no idea what the

1 argument is. Dr. Paustenbach has said he's willing to
2 produce them. Dr. Paustenbach has the materials, and
3 they are here, and so we've asked they be brought out.
4 And I have no idea what the substance of the objection
5 is.

6 JUDGE KLINE: What materials are we talking
7 about?

8 MR. RUCKDESCHEL: Presentations that
9 Dr. Paustenbach has either been author of or
10 participated in giving that relate to asbestos and
11 brakes and clutches.

12 MR. LANKFORD: It's essentially the same as
13 prior testimony which the court has ordered to be
14 reciprocal and we're stating that, the witness is
15 stating he'll provide it if there is no objection, just
16 as he did with the transcripts. And that is our
17 position, that if it's not something that he's obligated
18 to provide or we're obligated to provide, it wasn't
19 provided to him in the case, he's not relying upon it
20 for his opinions. But to the extent the court is going
21 to ordinary it be provided, as it did with the
22 transcripts, we simply ask it be reciprocal.

23 MR. RUCKDESCHEL: You Honor, it's sitting in a
24 box right here.

25 JUDGE KLINE: I don't have a problem with that

1 making it reciprocal. I think you're entitled to see
2 what an expert witness has said on other occasions
3 pertaining to the very issues in the court at this time.
4 Both sides are entitled to that. As long as it's
5 restricted to the issues in this case.

6 MR. RUCKDESCHEL: It is.

7 JUDGE KLINE: Go ahead, produce it, and I will
8 require the plaintiff to do the same for the defendant,
9 to gather together whatever it is that you're asking
10 for, which I think is the presentations and -- let's
11 see. This is item 22?

12 MR. RUCKDESCHEL: That's correct, Your Honor.
13 There has been no request for those materials by the
14 defendants. And we're a week from the close of
15 discovery. There has been no prior request for those
16 items.

17 MR. LANKFORD: Well, and it's our position
18 there is no proper request by plaintiffs' counsel, but
19 to the extent the court is ordering it to be provided
20 for the reasons the court stated in terms of, you know,
21 both sides putting all the cards on the table with
22 respect to this issue we would ask that it be
23 reciprocal.

24 JUDGE KLINE: Well, I'm not even sure you can
25 ask a party to just bring with him stuff without showing

1 some cause. But let's go ahead and have him, the
2 witness at this point, make available those items, and I
3 think that if I have the authority I would require the
4 defendants' professional experts to do the same thing,
5 that is to produce for the plaintiff all documents that
6 pertain, etc., etc., under 22, containing asbestos,
7 brakes, clutches and other automobile parts.

8 MR. LANKFORD: You said defendants. I take it
9 you mean reciprocal pertaining to the plaintiffs'
10 experts?

11 JUDGE KLINE: Yes, I'm sorry.

12 MR. LANKFORD: Thank you, Your Honor.

13 BY MR. RUCKDESCHEL:

14 Q Could we have these documents, please?

15 JUDGE KLINE: If in fact you contest this you
16 ought to give the other side sufficient time to get
17 before the judge to request the same thing.

18 MR. RUCKDESCHEL: Was that comment directed to
19 plaintiffs' counsel?

20 JUDGE KLINE: The comment was directed to
21 plaintiffs' counsel, right.

22 MR. RUCKDESCHEL: Okay.

23 JUDGE KLINE: I'm requiring you to do that
24 which I'm requiring the defendants' expert to do.

25 MR. RUCKDESCHEL: I understand. You're saying

1 if we want to look at them now we have to agree?

2 JUDGE KLINE: No, I didn't say that.

3 MR. RUCKDESCHEL: Okay.

4 JUDGE KLINE: I simply said that I'm requiring
5 you to do it. Now if in fact you take exception to
6 this, and I suggest to you that you should be required
7 to take exception to it within the next couple of days,
8 so that the defendant can get before the judge and say,
9 Judge, I would like these documents before the discovery
10 cut-off.

11 MR. RUCKDESCHEL: I appreciate that. Thank
12 you, Your, Honor for the clarification.

13 BY MR. RUCKDESCHEL:

14 Q Am I correct, Doctor, the documents aren't
15 here right now?

16 A Right. They could be her at lunchtime.

17 Q Okay, that would be great. We'll look at them
18 this afternoon. We have finished with the --

19 MR. LANKFORD: And it's our position to the
20 extent you're making it reciprocal, you know, we'll
21 provide them.

22 MR. RUCKDESCHEL: We're not agreeing to that
23 and we'll bring it up with the judge as suggested by
24 Master Kline.

25 JUDGE KLINE: Well, I'm requiring it as a

1 special master. If you want to take exceptions you can
2 take exceptions.

3 MR. RUCKDESCHEL: I understand, You Honor, and
4 that's all I'm saying to counsel here, it's requested we
5 stipulate that we agree. We're going to be filing our
6 exceptions.

7 MR. BELL: We will preserve the right to file
8 any exceptions as well.

9 (Discussion off the record.)

10 THE WITNESS: Counsel, are we going into a new
11 line of questioning?

12 MR. RUCKDESCHEL: Yes, would you like to take a
13 brake?

14 THE WITNESS: Sure. Just two or three minutes.

15 MR. RUCKDESCHEL: Sure.

16 (Brief recess.)

17 THE VIDEOGRAPHER: Back on the record. The
18 time is 10:07.

19 BY MR. RUCKDESCHEL:

20 Q Dr. Paustenbach, can you tell me when the last
21 time you gave testimony in deposition or court in an
22 asbestos case?

23 A Yes.

24 Q When was that?

25 A I think it was a week ago.

1 Q Is that the Rizzi case?

2 A Yes.

3 Q In New York?

4 A Yes.

5 Q What disease did Mr. Rizzi have?

6 A Mesothelioma.

7 Q And can you describe for me generically what
8 his occupational history was?

9 A His occupational history, you know, he had
10 some -- well, it's Matos and Rizzi. They are both in
11 the case.

12 Q Okay. Let's talk about Mr. Rizzi.

13 A As I recall, Rizzi had exposure in the steel
14 mill, and Mr. Matos was a young man who had exposure I
15 guess for about 18 months as a mechanic. Now it's
16 possible I've turned the two around. But one had it
17 from I think age 14 to 15 1/2, he was a, well, he
18 claimed to be a full-fledged mechanic and studied under
19 George, his one or one-and-a-half-year-old older
20 friend.

21 And the other gentleman's primary exposure was
22 to, in my view, when he worked in the steel factory but
23 he also had exposure as a mechanic as well. He was a
24 lifelong mechanic.

25 Q And what disease did Mr. Matos have?

1 A I think they both had mesothelioma.

2 Q Can you give me a three to four-minute summary
3 of your opinions with regard to Mr. Rizzi and his
4 exposures, causation of his disease, the types of
5 things you talked to the jury about on direct
6 examination?

7 MR. LANKFORD: Objection to the form.

8 THE WITNESS: Can I hear the question again?

9 JUDGE KLINE: This Herb Kline. Can I ask
10 everybody to move a little closer to the phone?

11 THE WITNESS: I'll speak up, Judge.

12 MR. RUCKDESCHEL: I was leaning back. So I'll
13 lean forward.

14 JUDGE KLINE: Thank you.

15 BY MR. RUCKDESCHEL:

16 Q Dr. Paustenbach, I can reask the question.
17 Can you give me a three- or four-minute summary of what
18 your opinions were with regard to Mr. Rizzi in that
19 case?

20 MR. LANKFORD: Same objection.

21 JUDGE KLINE: Do you want me to rule on that?

22 MR. LANKFORD: I'm sorry, Your Honor?

23 JUDGE KLINE: Do you want me to rule on the
24 objection?

25 BY MR. RUCKDESCHEL:

1 Q The doctor said he'd be happy to do it.

2 JUDGE KLINE: Okay.

3 THE WITNESS: On my direct, because of a number
4 of rulings by the judge, and I guess just the way the
5 case was put forward ultimately, I didn't have an
6 opportunity to talk much about either a person's
7 exposure scenario. That's not something that the judge
8 wanted me to opine about because it had been discussed
9 by another expert. So I can't say much because I didn't
10 have a chance to say very much. Dr. Rabinowitz
11 apparently covered that as far as the judge was
12 concerned.

13 Q Were there other areas of your testimony that
14 were limited due to other witnesses having covered
15 those subjects?

16 A There may have been but she asked me to leave
17 when she was discussing what she wanted me to talk
18 about. That was something, I think it's called a side
19 bar or --

20 Q I understand.

21 A Yeah.

22 Q So had you been allowed you would have spoken
23 about Mr. Rizzi's exposure scenario. Did you discuss
24 epidemiology in your testimony in the Rizzi case?

25 MR. LANKFORD: Misstates testimony, objection

1 as to form and calls for speculation.

2 THE WITNESS: But I can answer?

3 JUDGE KLINE: You may respond.

4 THE WITNESS: You want me to respond, Judge?

5 JUDGE KLINE: You may respond.

6 THE WITNESS: Okay. The judge felt that
7 Dr. Teta, another one of the defense experts had covered
8 epidemiology, and she felt that if I was to discuss it,
9 it would be the same kind of testimony. And she in fact
10 asked if I could defer to her, and I said that would be
11 fine.

12 BY MR. RUCKDESCHEL:

13 Q Okay. And so you didn't discuss the exposure
14 scenario and you didn't talk about epidemiology on your
15 direct?

16 A Very little. Only in what I would call a
17 state-of-the-art manner. I was able to mention when
18 the knowledge was gained, but as I said, I was not --
19 she considered it duplicative testimony if I was to go
20 into much detail.

21 Q I understand. Was your testimony then
22 confined generally to state of the art issues?

23 MR. LANKFORD: Objection, form.

24 THE WITNESS: I think it would be wrong to say
25 it was confined because it makes it sound like the judge

1 didn't think I was able to talk about it. She just
2 didn't want to hear about it twice.

3 Q Right. I'm not suggesting that.

4 A Okay.

5 Q Was your testimony in the case simply about
6 state of the art in general?

7 A I would say that my testimony was about risk
8 assessment and state of the art. That would be the
9 primary focus.

10 Q Had you developed opinions in that case
11 regarding epidemiology and the exposure scenario?

12 A I had opinions about it.

13 Q What I'd like you to do, Dr. Paustenbach, is
14 for you to give me a brief outline of the opinions that
15 you had formed in the Rizzi case regarding Mr. Rizzi's
16 exposure. And by that I mean what you would, the
17 outline of your opinion on epidemiology on exposure
18 scenario, state of the art risk assessment. The five-
19 minute Reader's Digest version of the Dr. Paustenbach's
20 opinions in the Rizzi case.

21 MR. LANKFORD: Let me object as to form and
22 also not, it's really calling for speculation as to what
23 he would have testified for. Your Honor, as I
24 understand the question, he's asking him what his
25 opinions would have been in another case had he, you

1 know, provided them. And it's improper to ask this
2 witness about opinions that he may have formed in an
3 unrelated case this one in, and essentially ask him to
4 sit here and formulate opinions with respect to another
5 case that he's not being asked to offer testimony on in
6 this matter.

7 MR. RUCKDESCHEL: Judge, the witness just
8 testified --

9 JUDGE KLINE: He can tell us if he formed any
10 opinions at that time, and if so what were they. I
11 think it's an appropriate question.

12 BY MR. RUCKDESCHEL:

13 Q Doctor, you did form those opinions in the
14 Rizzi case, correct?

15 A I had opinions about the exposure of the
16 plaintiffs, and I had opinions about epidemiology.

17 Q And you had opinions about state of the art
18 and risk assessment?

19 A Yes, sir.

20 Q Okay. Tell me briefly what those opinions
21 were in each of those subjects?

22 A Okay. As I said, one of the plaintiffs had
23 been a lifelong mechanic and had also been involved in
24 removing insulation from sheet metal in a steel mill.
25 And from what I can tell, even the plaintiffs' experts

1 thought that the exposure in the steel facility would
2 in and of itself have been sufficient to cause his
3 disease. So that deals with the exposure issue.

4 I've testified numerous times before that
5 exposures of brake mechanics to brake wear debris is
6 not something that should cause and has been shown to
7 cause asbestos-related disease. And that would apply
8 to that plaintiff as well.

9 With respect to the exposure during the ages of
10 14 to 15 1/2, I concluded that if those exposures
11 occurred, of course they would not they would be not
12 unlike any other mechanic's exposures except of much
13 more limited duration. Therefore, the dose would have
14 been vanishingly small if it occurred.

15 As you know there was testimony that he never
16 actually worked in that facility. I think that was
17 just added evidence in addition to other factors that
18 made me question and have a strong opinion that the
19 disease was not related to his work as a brake
20 mechanic.

21 In the area of risk assessment I basically went
22 over the difference between theoretical risk and
23 measured risk and the differences between environmental
24 risk criteria and occupational health risk criteria.

25 With respect to state of the art I discussed

1 what I discussed in my 2004 paper which is evolving
2 state of knowledge involving asbestos since 1900 to the
3 current day as well as break wear debris and brake dust
4 since 1900 to 2000.

5 With respect to epidemiology I said that, I
6 would have said what I said in my 2004 paper and in
7 other cases that the epidemiology studies
8 overwhelmingly indicate there is no increased risk for
9 auto mechanics, and that based on the epidemiology and
10 the toxicology and the exposure data, these, none of
11 this surprises me.

12 So I think the scientific data are very
13 consistent across the board with respect to the
14 relationship between work as a brake mechanic and the
15 lack of increase of asbestos-related disease. So
16 that's in a nutshell what I would have said had I had
17 an opportunity to do so.

18 Q Do your opinions regarding epidemiology change
19 from case to case in brake cases?

20 A It depends on what new information is
21 available. It wouldn't change if there is no new
22 information. In recent years someone has an opinion
23 about every three months that they share in the
24 literature and I try to incorporate that in my view.

25 Q Have your opinions concerning state of the art

1 changed in the last two years with regard to brakes?

2 A I wouldn't say they've changed with respect to
3 what I believe occurred between 1900 and 2000. I think
4 by definition state of the art means what is going on
5 up to the movement so I would say the information of
6 the last two years further convinces me that the
7 relationship, or lack of a relationship actually
8 between exposure as a mechanic and mesothelioma or lung
9 cancer, asbestosis, is just not there.

10 Q Am I correct that is primarily due to the dose
11 of asbestos that mechanics are exposed to?

12 A I wouldn't limit it to that. I think that
13 there are five or six factors that I've discussed
14 before. Langer has his own views about the five or six
15 that are very similar to mine. I'd say virtually
16 identical except he has stronger views that the break
17 wear debris, even the asbestos and break wear debris is
18 different. And he thinks it's not causal due to the
19 chemical change in the asbestos and the chrysotile.

20 I don't have a learned opinion about that but
21 that would be the only difference among the five
22 factors, that is, and I can go over those, it's
23 basically duration of exposure, concentration, the
24 fiber length of the fibers that are available, the fact
25 it's chrysotile, and, you know, of course, the

1 conversion to fosterite or olivine or whatever chemical
2 name you want to give to break wear debris. And I'd
3 say those would be the primary factors.

4 Q Okay. Is it fair to say that duration,
5 concentration and the conversion to fosterite or
6 olivine all relate to the issue of dose?

7 A Sure.

8 Q The length of the exposure is a factor that's
9 involved in calculating the dose?

10 A Sure.

11 Q And the concentration of dust in the air, and
12 we're talking about asbestos dust in the air, is how we
13 calculate the dose.

14 A Specifically OSHA fibers and chrysotile.

15 Q Okay. And the same with the conversion of
16 some or the vast majority of chrysotile asbestos in the
17 wear debris to some other mineralogical form?

18 A Correct.

19 Q Now I think that you testified in the past
20 that some small percentage of chrysotile fibers in wear
21 debris, I'm sorry, of the materials in wear debris
22 remain chrysotile fibers?

23 A I've said that you can measure airborne
24 chrysotile fibers and you can find them in the brake
25 wear debris. And that's what I said, that's the

1 difference between Langer and I. He happens to think,
2 and I have no reason to question him, that they are not
3 even asbestos fibers any longer.

4 Q And you're referring to Dr. Langer's paper
5 of --

6 A 2003 I think.

7 Q Regarding the, in essence the subject relates
8 to what temperature does the chemical composition of
9 the chrysotile fiber take on some different property?

10 A Well, it's not that simple but he's written
11 about it several times. I would say his last paper is
12 where he galvanizes his views about it. And I think
13 it's 2003 or 2004.

14 Q Do you find that paper to be an authoritative
15 piece of the medical scientific literature?

16 A I would think so. I don't have any reason to
17 think it would not be.

18 Q Do you rely on it?

19 A I do rely on it.

20 Q Okay. Can you give me in summary similar to
21 the summary that you just gave for your opinions in the
22 Rizzi case regarding your opinions in this case,
23 Dr. Paustenbach?

24 A Well, I think the summary would be very
25 similar. I think the state of the art discussion would

1 be the same. If you asked me about risk assessment the
2 risk assessment views would be the same. In this case,
3 of course, you have exposure to brake wear debris from
4 heavy equipment as well as autos. So that's a little
5 difference from Matos and Rizzi. It doesn't have any
6 significant impact on my views but it's a factual
7 difference. And, of course, the epidemiology hasn't
8 changed since last week so I would say that would be
9 the same as well.

10 Q Okay. I'd like to work through those each in
11 turn and again just get through the Reader's Digest
12 version of your opinions. So could you tell me,
13 Dr. Paustenbach, in summary fashion your opinions
14 regarding state of the art in this case?

15 A I guess I don't understand the question. The
16 state of the art in this case would be a one-hour
17 dialogue, and I would refer you to my 2004 paper. If
18 you want more than that, then I guess it's up to the
19 lawyers and the judge if you want me to give you a long
20 talk about state of the art.

21 Q I'm not -- if you can't give me a condensed
22 version of it, then that's okay. I'm just asking
23 whether you can.

24 A Sure, of course I can.

25 Q Can you give me a two-minute state of the art,

1 this is the kind of thing I talk about regarding state
2 of the art?

3 A I'd be happy to.

4 Q Okay. Would you please do so?

5 A Sure. With respect to asbestos and state of
6 the art I would say that asbestosis was thought to be
7 occurring, they didn't know it was asbestosis, but some
8 lung ailment in the early 1900s right at the turn of
9 the century. It took until 1930 for them to know that
10 asbestos did cause a unique disease called asbestosis.
11 That's made very clear in Meriweather and Price.

12 In 1955 the suspicions that sufficient doses of
13 asbestos in one form or another, if the dose is
14 sufficient, can increase the risk of lung cancer and
15 that's Doll's paper.

16 In 1960 Wagner is fairly certain that the
17 amphiboles can cause an increased risk of mesothelioma.

18 In 1964 Selikoff shows that things that were
19 thought to be not of significant risk with respect to
20 end product insulation, he finds there's an elevated
21 risk if the dose and duration are sufficient, certainly
22 for the amphiboles.

23 And then there becomes a regulatory flurry of
24 activity that begins around 1970 and continues through
25 1994. And that's both in the United States and in

1 other countries.

2 With respect to break wear debris, Thompson
3 suggests in 1963 that I wonder if it might be a public
4 health hazard to have break wear debris in the ambient
5 air. That is looked at in '68 by Lynch. He actually
6 starts looking at it in '66 and published his paper
7 in '68.

8 Because of the size of the particles in break
9 wear debris and because of the conversion to fosterite,
10 he concludes it's not a significant public health
11 hazard and it appears that the Public Health Service
12 agrees with him.

13 For various reasons EPA and Ford looked at that
14 issue some more over the next couple years and conclude
15 it probably isn't a public health hazard.

16 So at that point the door is kind of closed on
17 whether or not break wear debris is something that
18 people find to be an ambient air hazard.

19 With respect to brake mechanics, Hickish and
20 Knight look in 1968 at some brake and auto mechanics in
21 England. They say we don't think that exposures are as
22 high as we thought they'd be. In their view on a
23 time-weighted average basis they do not consider it a
24 significant health hazard, and they were making that
25 conclusion based primarily on comparison to the British

1 guideline for occupational exposure.

2 In 1975 Selikoff says my staff has been looking
3 at brake mechanics here in New York City, and they
4 think the exposures are higher than what they expected.
5 And they wonder whether this is something that is worth
6 sharing with the occupational health community. That
7 information is shared.

8 Over the next five to ten years various people
9 study the workplace and take measurements and generally
10 find that the exposures against the current
11 occupational, that is the contemporaneous occupational
12 exposure limits seem to be not excessive. Everybody
13 recognizes that if you grind there are peak exposures,
14 and if you blow out there are peak exposures, but on a
15 time-weighted average basis it appears that most,
16 virtually all workers in that business are below the
17 time-weighted average cumulative dose that people would
18 be concerned with.

19 That gets us up to I guess the modern era where
20 litigation raises the question again as to whether or
21 not brake dust is causing an increased risk of any of
22 the three asbestos-related diseases. In the
23 intervening years there is quite a bit of epidemiology
24 work between 1975 and 2005.

25 So that I think is a summary of the issue you

1 asked me about.

2 Q Thank you, Doctor.

3 THE WITNESS: Can you hear all right, Judge?

4 JUDGE KLINE: Yes, sir.

5 THE WITNESS: Okay.

6 BY MR. RUCKDESCHEL:

7 Q Regarding exposure are the opinions you have
8 related to exposure and exposure levels expressed in
9 your 2003 paper?

10 MR. LANKFORD: Objection to form.

11 THE WITNESS: Well, in a general -- I'm sorry.

12 MR. LANKFORD: And specifically are you asking
13 opinions overall, in this case?

14 BY MR. RUCKDESCHEL:

15 Q I'm asking him about his opinions regarding
16 exposure of brake mechanics to asbestos dust and
17 whether those opinions are set forth in his 2003 paper,
18 just as I asked it.

19 A I don't think the question is answerable as
20 presented because it's so broad. If you're asking me
21 can I apply that data to every single person that files
22 a claim and for which I give an opinion, the answer is
23 no.

24 If you want to know do I think that represents
25 the vast majority of persons normally employed as brake

1 mechanics or as auto mechanics I would say yes, the
2 data there I believe represents the vast majority of
3 people.

4 Q What you present in your 2003 paper is a
5 collection of data from various sources that you then
6 analyze and come to a conclusion regarding what the
7 average exposures were of brake mechanics over a period
8 of time?

9 A Right.

10 Q And when you say the vast majority, this
11 information is applicable to the vast majority of
12 individuals, what are you talking about in terms of
13 magnitude, that majority is, 60 percent, 80 percent,
14 95 percent?

15 A Well, based on what I've learned the last four
16 years, I would think it would apply to virtually
17 everyone. Now having said that, I have read testimony
18 of persons that were outside the norm. And I've been
19 asked hypotheticals about people that to the best of my
20 knowledge didn't exist and those behaviors didn't
21 exist.

22 So I'm hesitant to say that that paper covers
23 every imaginable person. And I know that Dr. Lemen has
24 put into question how broadly one can apply that
25 analysis as presented in the 2003 paper.

1 But based on what I know, it should apply to
2 virtually everyone. That is to say, any reasonable
3 number of brake changes in a career.

4 Q Are you familiar with Mr. Mallia's testimony
5 regarding the number and frequency of brake repair
6 work --

7 A Yes.

8 Q -- that he performed during his lifetime?

9 A Yes, I'm familiar with that.

10 Q Do you question the veracity of that
11 testimony?

12 A Well, it's inconsistent so I have to question
13 the veracity of it.

14 Q Okay.

15 A At some point he and his brother say thousands
16 and it can't be thousands when you work out the math.
17 And then later he says, you know, it's so many times
18 per week or per day. You know, ultimately I try to
19 infer that, what I could from the testimony, and it
20 looked like if he did what he said he did, I would say
21 he would fit in with the kind of people that were
22 described in my 2003 paper.

23 Q The data that goes into the 2003 paper upon
24 which the average exposure that you calculate, were the
25 individuals that were performing the work that form the

1 basis of the data doing the same operations with brake
2 materials that Mr. Mallia describes doing in this
3 deposition?

4 A Well, you don't always know. Mallia does not
5 discuss doing much of what some people believe is the
6 primary source of exposure, which is arcing or
7 grinding. That doesn't seem to be a predominant part
8 of what he does.

9 He mentions sanding frequently which is
10 frankly, pretty unusual. It's not something you read
11 about people doing nor should they have had to do when
12 doing new installations. So that's my view on that.
13 If I was to guess based on what he said, his exposures
14 probably would have been a little bit lower than the
15 norm. Of course it's happening much later and you
16 would expect exposures only to be going down in the era
17 when he's doing the brake work.

18 Q Let's go through, Doctor, the types of things
19 an individual working with brakes can do that can cause
20 exposure to asbestos. Is there a potential for
21 exposure to asbestos in opening the box?

22 A Well, we have to put a time frame maybe on your
23 questions. Do you want to talk about it for his
24 lifetime or in general?

25 Q I'd like to talk about it for the time period

1 between 1978 and 1985.

2 A Okay.

3 MR. LANKFORD: Objection to form.

4 THE WITNESS: Okay. 1978 to 1985.

5 BY MR. RUCKDESCHEL:

6 Q Is there a potential for exposure to airborne
7 asbestos in opening a box of brake pads?

8 A If they are asbestos-containing brake pads
9 there is a possibility for exposure. I don't know if
10 it's quantifiable but there is a potential for
11 exposure.

12 Q Are you aware of anybody attempting to
13 quantify the potential exposure of opening a box of
14 asbestos-containing brake pads?

15 MR. LANKFORD: Let me object to the question in
16 terms of form and with respect to privilege. And
17 specifically with respect to form, you know, what you
18 mean by quantity and, you know, asbestos, either talk
19 about the different types or the issue with respect to
20 what is asbestos, and with respect to privilege, you
21 know, and any work he may have done in a consulting
22 fashion in that regard. To the extent he's not relying
23 up on it again --

24 JUDGE KLINE: Well, can we have the question
25 again?

1 MR. RUCKDESCHEL: The question, Your Honor, is
2 whether Dr. Paustenbach is aware of anybody attempting
3 to quantify the amount of asbestos dust released when
4 you open a box of asbestos containing brakes.

5 JUDGE KLINE: Not him but somebody else?

6 MR. RUCKDESCHEL: It could be him. I'm just
7 saying is he aware of anybody attempting to do that.
8 I'm not asking for the results. Just if he knows of
9 people trying to do it.

10 JUDGE KLINE: You can respond to that question.

11 THE WITNESS: Okay. I'm aware of Longo's
12 report on that issue.

13 BY MR. RUCKDESCHEL:

14 Q Are you aware of anybody else attempting to
15 quantify the amount of asbestos dust that is released
16 from opening a box of asbestos-containing brakes?

17 A I've done limited preliminary work on that
18 issue.

19 Q When?

20 MR. LANKFORD: Let me object to the extent it
21 calls for privileged information to the extent that the
22 witness is discussing something that he did as a
23 consultant which he is not relying upon. And I don't
24 know if that's the case or not but I'll let the witness
25 determine whether it fits into that category.

1 MR. RUCKDESCHEL: The question, Judge, is when.
2 That's all I'm asking.

3 JUDGE KLINE: All right, you can answer that
4 question.

5 THE WITNESS: In the last two years.

6 BY MR. RUCKDESCHEL:

7 Q Were dust measurements taken?

8 MR. LANKFORD: Same objections. To the extent
9 he did work that he's not relying upon for, and he did
10 it in a consulting privilege -- a consulting capacity is
11 protected by work product privilege. And with respect
12 to exactly what he did and how he did it, even I would
13 say the time that he did it and whether he did it, it's
14 protected by the work product consulting privilege.

15 The parties have the right to consult with
16 experts and to have them perform work without having to
17 disclose the fact that the consultants, the consultation
18 even took place or the work took place to the extent
19 that it's something that they are not relying upon and
20 it was done under the work product privilege for
21 consultation purposes as opposed to opinions within a
22 case.

23 MR. RUCKDESCHEL: Okay. And, Your Honor, this
24 is Jonathan Ruckdeschel, so you know, and I will
25 respond. Dr. Paustenbach, the difficulty here, from the

1 plaintiffs' perspective is that Dr. Paustenbach has
2 testified that he's going to testify in this case and
3 he's formulated opinions in this case regarding
4 exposures to asbestos and what the levels of exposure to
5 asbestos were of brake mechanics when performing this
6 type of work. Dr. Paustenbach has acknowledged that
7 there is a potential for exposure to asbestos when
8 opening a box of brakes.

9 The issue of whether Dr. Paustenbach is relying
10 upon the results of his study is not determinative of
11 whether we are entitled to inquire into that subject,
12 given that he is a testifying expert. And that's
13 because the basis of Dr. Paustenbach's opinions in this
14 case are now open for discovery. And the basis includes
15 not only, Judge, things that Dr. Paustenbach chooses to
16 rely upon, but also things that Dr. Paustenbach knows
17 that he then chooses not to rely upon.

18 And here's why I think it's important. I'm
19 entitled to know, and Mr. Mallia is entitled to know
20 whether Dr. Paustenbach's experiments that measured or
21 attempted to measure how much dust is released when you
22 handle, when you open a box of brakes, if those numbers
23 came out high, and he chooses not to rely upon them,
24 that's obviously critically relevant to the veracity of
25 his opinions in this case. If he's got a high number

1 there and he says, well, I'm not going to rely on that
2 for whatever reason. He can explain why he does or
3 doesn't rely on it.

4 But that's information Dr. Paustenbach has, and
5 he's got it in his brain, and he's testifying about
6 things in his mind. And he can't erect a Chinese wall
7 in his mind and say, well, I got information, factual
8 information about this subject directly related to the
9 case, but I'm going to put it over here behind the wall
10 and I'm only going to testify about these other things.

11 And I believe the reason he would do so is
12 because the numbers came out high. And so I think it's
13 a proper subject of discovery and I think that any work
14 product objection has been waived when they designated
15 Dr. Paustenbach as an expert to talk about the subject
16 of the exposure level.

17 MR. LANKFORD: Well, Your Honor, I disagree
18 with that for many reasons. And before I go into a long
19 I guess a list of those, perhaps it makes sense to take
20 a few-minute break and for me to talk to Mr. Paustenbach
21 or Dr. Paustenbach, and see what he's referring to, and
22 if it's something that my clients, Ford and GM, have a
23 work product privilege with respect to that, you know,
24 we wish to assert it at this time.

25 JUDGE KLINE: Why don't we take a two-minute

1 recess. Okay?

2 MR. RUCKDESCHEL: Thank you, judge.

3 THE VIDEOGRAPHER: Off the record. The time is
4 10:43.

5 (Brief recess.)

6 THE VIDEOGRAPHER: Back on the record. The
7 time the 10:51.

8 MR. LANKFORD: Could we have the last question
9 and answer read back, please?

10 (Record read.)

11 MR. LANKFORD: I'm sorry, if you could one back
12 from that.

13 (Record read.)

14 BY MR. RUCKDESCHEL:

15 Q Okay, the pending question, Doctor, was, were
16 dust measurements taken?

17 A Well, let me say that I maybe answered the
18 question in a global way. I personally didn't conduct
19 a study but it was conducted within my firm. I was not
20 personally involved in doing that work and haven't
21 analyzed the data. But the answer to your question,
22 measurements were taken. I think to the best of my, at
23 this point I think it's considered to the best of
24 knowledge privileged information beyond that.

25 MR. LANKFORD: And we're asserting the

1 privilege, the work product privilege. The witness has
2 stated that it was preliminary work done, he's not
3 relying upon it. It was done in a consulting fashion,
4 and we are asserting the work product privilege.

5 JUDGE KLINE: Yes, sir.

6 MR. RUCKDESCHEL: I believe, Judge, that I can
7 lay a foundation in the next three questions that will
8 answer this question for us.

9 JUDGE KLINE: All right.

10 BY MR. RUCKDESCHEL:

11 Q Dr. Paustenbach, you are the 100 percent owner
12 of ChemRisk, correct?

13 A Yes.

14 Q You are the president of ChemRisk?

15 A Correct.

16 Q And the people that performed this work are
17 your employees?

18 A Correct.

19 Q And they did so as part of ChemRisk's work for
20 Ford and General Motors?

21 A I would think that that's true.

22 Q And you have testified in the past that
23 100 percent of your work for ChemRisk and General
24 Motors is related to litigation?

25 A Well, I don't know if I've said that.

1 Q Okay. I can get the transcript out if that's
2 necessary.

3 MR. LANKFORD: I would argue it's not
4 necessary. It doesn't change the analysis. You can
5 have a consulting expert within the litigation.

6 BY MR. RUCKDESCHEL:

7 Q Doctor, are you aware of the what the results
8 of the dust testing are in a quantifiable sense?

9 MR. LANKFORD: And objection, he stated that's
10 preliminary, there weren't any I guess final results.

11 BY MR. RUCKDESCHEL:

12 Q Doctor, are you aware of the preliminary
13 results of the dust tests?

14 A I don't have quantitative information from
15 those tests.

16 Q You've never been provided with that
17 information?

18 A I've never analyzed that information.

19 Q Well, have you been provided with that
20 information?

21 A I've seen results. I, of course, well, they'd
22 have to be averaged and looked at to make sense of. I
23 haven't done that.

24 Q What was the range of the results?

25 MR. LANKFORD: I'm asserting the privilege at

1 this point. It was done as a consultant. It is not
2 information that he's relying upon here. Moreover, it's
3 not even information that has been part, it's not even
4 work that has been completed. It's preliminary in
5 nature, and we're asserting the work product privilege.

6 MR. RUCKDESCHEL: Your Honor, the relevant
7 portion of the information is the number. And he's
8 aware of what the range of numbers is I believe, and
9 we'd ask that the court making a ruling.

10 MR. BELL: Your Honor, Henry Bell.

11 JUDGE KLINE: Yes, sir.

12 MR. BELL: If I can add in, we think this
13 information is protected under Rule 1.280. It's in fact
14 work product done under the direction of counsel.

15 We rely on Procter & Gamble Company v. Swiley
16 462 Southern 2nd 1188; and the Leonard Northrop decision
17 of the Supreme Court of 2004, 865, Southern 2nd, 1267,
18 Your Honor.

19 Florida law suggests, I think the plaintiffs'
20 argument here is because Mr. Paustenbach is a testifying
21 expert that somehow the product, the work product
22 privilege is completely waived.

23 That's not true. If he's not relying upon it,
24 it's not waived, and therefore it's protected. The
25 Proctor & Gamble case, Your Honor, by the way, deals

1 specifically with studies done by defendants in products
2 liability litigation.

3 MR. LANKFORD: And I think it's also important
4 to note, Your Honor, that it's preliminary, it hasn't
5 been completed and therefore is not of the nature of
6 type of studies that, you know, one would reasonably
7 rely upon for such opinion.

8 JUDGE KLINE: Are you saying that the opinions
9 that the work has no credibility at this point, that
10 it's not worthy of consideration?

11 MR. LANKFORD: Well, I'm saying he's not
12 relying upon it, he said it's preliminary in nature and
13 essentially, as I understand the record at this point,
14 the assertion is that somehow it's relevant that, it
15 would be relevant to an opinion that or what would be
16 relevant to an opinion is an incomplete study in which
17 conclusions have not been reached. And we argue that
18 that would not be relevant to an opinion, not be
19 admissible, No. 1, as foundation for such an opinion.
20 But more importantly, it's protected by the work product
21 privilege we are asserting.

22 MR. BELL: Furthermore, Your Honor, plaintiffs
23 have experts in this field that have done their own
24 studies that cannot show a need for this information and
25 pierce the work product doctrine.

1 MR. RUCKDESCHEL: Your Honor, can we have one
2 attorney handle this, Please?

3 JUDGE KLINE: You don't want them to
4 double-team you.

5 MR. RUCKDESCHEL: That's right. It's enough to
6 respond to one.

7 JUDGE KLINE: Well, folks, it appears probable
8 that when you hire somebody under these rules, do some
9 investigation or render opinions or so forth, and you
10 don't use them as a testifying witness, that that is
11 nondiscoverable. That's the nondiscoverable part.

12 But if you are using them as a testifying
13 witness, I guess you could argue, yeah, but he didn't
14 rely upon that in coming to his opinion.

15 MR. BELL: Your Honor, Northrop talks about
16 when a litigant decides to rely on certain materials or
17 information or prior transcripts, testimony, etc., and
18 the privilege is waived when you're going to use it in
19 court. But here, given that these studies haven't
20 been --

21 JUDGE KLINE: There not using in court.

22 MR. BELL: Exactly. And they are not in a
23 state to be using. And again, these are things being
24 done by someone who is a scholar who doesn't share these
25 kinds of things before they are finished.

1 JUDGE KLINE: Well --

2 MR. RUCKDESCHEL: Your Honor, again, the
3 problem with that is it has no boundaries. It says that
4 you can consider everything, and that I only have to
5 tell you things that I like. And that's not the way the
6 law can be. It can't be the way the law is structured.
7 And, you know, unfortunately I don't have those cases in
8 front of me, I can't respond to them substantively. But
9 I would request that the judge, that Your Honor order
10 this information produced. The trial judge can
11 determine whether it's admissible or not. That's a
12 different issue.

13 MR. LANKFORD: And the work was not done in
14 this case, Your Honor. That's an important distinction.

15 JUDGE KLINE: The work was not done in this
16 case.

17 MR. LANKFORD: Correct.

18 JUDGE KLINE: I'm inclined to believe a
19 testifying expert can be asked questions about does he
20 know of other studies, has he engaged in other studies,
21 would these other studies if he were aware of them,
22 change his opinion. So I'm inclined to believe probably
23 he should be required to answer. But I don't want to
24 put you in the position of, you know, once the cat is
25 out of the bag. So why don't we just, why don't we just

1 let the judge decide this.

2 MR. LANKFORD: Thank you, Your Honor.

3 MR. RUCKDESCHEL: Okay, we'll move on.

4 JUDGE KLINE: Since you all have, the plaintiff
5 has other studies that show what they believe these
6 studies should show, then you have something else to
7 use.

8 MR. RUCKDESCHEL: Well, that's true, Your
9 Honor, except Dr. Longo's studies are attacked heavily
10 by the defense in every case. And so if
11 Dr. Paustenbach's study or ChemRisk's study has found
12 numbers that are consistent with Dr. Longo's study it's
13 going to be an enormously important issue in this
14 litigation and this case.

15 JUDGE KLINE: You're probably right. I would
16 be inclined to make it disclose. But at this point, as
17 I say, once the cat is out of the bag, it's out of the
18 bag. So let's just move on and you can bring this up
19 before the judge and see whether or not he feels that
20 that this should be disclosed.

21 MR. RUCKDESCHEL: Thank you, judge.

22 BY MR. RUCKDESCHEL:

23 Q Dr. Paustenbach, I was asking you about
24 potential avenues for exposure during the performance
25 of brake repair, and we started with opening the box.

1 And I want to work through the process.

2 So after opening the box where there is a
3 potential for exposure. Is there a potential for
4 exposure to airborne asbestos in simply handling the
5 brake pad?

6 A You certainly could have some exposure that may
7 or may not be measurable. But by definition there
8 would be airborne particles.

9 Q Okay. And is there a potential for exposure
10 to airborne asbestos dust if one files the edges of the
11 brake pad to bevel the edge?

12 A Assuming there is no local exhaust ventilation
13 and the person is not wearing a respirator there would
14 be potential for exposure.

15 Q And in this case Mr. Mallia testified that he
16 filed the edges?

17 A That's what he said.

18 Q And he testified he did not wear a respirator?

19 A That's what he said.

20 Q And there was no testimony regarding local
21 exhaust?

22 A I didn't see any.

23 Q Is there a potential for exposure to airborne
24 asbestos in taking the wheel off of, for example, a
25 dump truck?

1 A Now these questions are all between 1978 and
2 1985.

3 Q That's correct, and I'd like you to assume so
4 that we can continue, that all the brake pads that
5 we're talking about have asbestos in them. For
6 example, would loosening the lug nuts of the wheel and
7 taking the wheel off have a potential for exposure to
8 airborne asbestos?

9 MR. LANKFORD: Incomplete hypothetical.

10 THE WITNESS: I'm not sure about that. I'm not
11 sure you'd be able to measure anything.

12 BY MR. RUCKDESCHEL:

13 Q Have you seen documents or studies that have
14 discussed that as a potential avenue for exposure?

15 A I'm not sure that I remember anybody
16 specifically talking about that task. You could infer
17 or assume there was some potential exposure but it's
18 not something that we focused on.

19 Q Okay.

20 A "We" meaning the scientific community.

21 Q I understand. And then if we move forward,
22 the drum is removed and cleaned out; is that correct?

23 A If it's a drum brake, yes, sir.

24 Q And I want to confine our discussion here to
25 drum brakes today. And the drum is then cleaned?

1 A It usually is.

2 Q And if it is cleaned with compressed air like
3 Mr. Mallia testified he cleaned the drum, there is a
4 potential for exposure to airborne asbestos fibers?

5 MR. LANKFORD: Overbroad.

6 THE WITNESS: If there is no protective
7 equipment or engineering controls there would be
8 certainly potential for exposure.

9 BY MR. RUCKDESCHEL:

10 Q And there was no protective equipment or other
11 protective measures used by Mr. Mallia; is that
12 correct?

13 A Not that I read.

14 Q And after the brake is reassembled Mr. Mallia
15 testify regarding cleaning, cleaning the work area,
16 sweeping or otherwise?

17 A Now you're switching between generalities and
18 Mr. Mallia in these questions. Which one do you want
19 to answer?

20 Q Let's do it generally then.

21 A Then you want to say mechanics in general, do
22 they ever clean the area in which they work?

23 Q Let's use the hypothetical. If a mechanic
24 chooses to clean the area that he works in after filing
25 a brake pad and performing a blow-out with compressed

1 air of a drum brake and then reinstalling the new brake
2 pads is there a potential for exposure during the
3 clean-up process?

4 A Sure, there is a potential for exposure.

5 Q And a mechanic with facial hair has a
6 potential to have asbestos land on and become, attached
7 to I guess is the wrong word, but to get asbestos in
8 their facial hair, would you agree?

9 A I don't know if it has any relevance to health
10 or this case, but I could agree that dust particles get
11 in his beard.

12 Q And the EPA in the, in the 1986 publication
13 regarding potential exposures to mechanics from brake
14 repair discusses the possibility of exposure to
15 asbestos from asbestos landing on clothing or in
16 hair; is that correct?

17 A Are you talking about the 1986 EPA document or
18 OSHA document?

19 Q Yes, EPA document.

20 A I think there is a discussion of that, yes.

21 Q And that is an industrial hygiene
22 consideration when somebody works in a contaminated
23 atmosphere?

24 A Contact with clothing and hair can be,
25 depending on the chemical.

1 Q And for asbestos it is?

2 A It's more important with respect to clothing.
3 I've not seen anybody give serious weight to the
4 contamination of hair as being a significant pathway
5 for contaminating the household. But certainly
6 clothing would be.

7 Q Okay. And with regard to clean-up what method
8 did Mr. Mallia testify they used to clean up the
9 garage?

10 A I think he used both sweeping and blowing.

11 Q Blowing of compressed air?

12 A Sounds like it. That's, at times that's what
13 he said he did.

14 Q And if Mr. Mallia filed the edge of a brake to
15 bevel the edge and then clean the file off by blowing
16 the compressed air would you expect that that would
17 release airborne asbestos fibers that were respirable
18 into the environment?

19 A Anytime you ask about any and is there
20 exposure, of course it can be minuscule and
21 insignificant. But, you know, the most direct answer
22 to your question is sure, there could be some airborne
23 respirable fibers.

24 Q Do you have a copy of your 2003 paper?

25 A Yes.

1 Q Could we have that, please?

2 Doctor, while your assistant is retrieving
3 that, could I ask you, what is your current rate that
4 you're charging?

5 A \$445 per hour.

6 Q When did that go up from 425?

7 A Actually I'm not charging 445 per hour.

8 Q Okay. What are you charging?

9 A I'm not sure. I think it may be 425.

10 Q What is ChemRisk charging for, and I
11 apologize, your colleague here with us, could you tell
12 me her name so i don't have to keep saying your
13 colleague?

14 A Yeah, Jennifer Pierce.

15 Q Ms. Pierce.

16 A And I'm not sure what her billing rate is.
17 It's probably around \$150 an hour.

18 Q And is she on the clock today?

19 A Right this moment she's on the clock.

20 Q So if we add up what you're charging which
21 would be approximately \$425 an hour and what Ms. Pierce
22 is being billed at which is approximately \$150 an hour
23 we're looking at a total for ChemRisk of 575 or
24 thereabouts an hour?

25 MR. LANKFORD: But her time should probably be

1 billed to you because we only needed her for all these
2 documents.

3 BY MR. RUCKDESCHEL:

4 Q Now if we can have the 2003 paper, please?

5 Thank you, Doctor. Doctor, there are a number of
6 studies that you report on and collect in the 2003
7 paper; is that correct?

8 A Correct.

9 Q Can you mark for me -- I'd like to mark that
10 paper as Exhibit 4 in the deposition and we'll see if
11 we have a clean copy.

12 Can I see what is in front of you again?
13 Doctor, I do want to mark that copy as it has
14 highlighting on it. We don't need to keep it with the
15 transcript, but since it's got markings on it and I'm
16 referring to it, I'd like to mark it so that the record
17 is clear. So if we could mark that as Exhibit 4,
18 please.

19 (Plaintiffs' Exhibit 4 was marked for
20 identification by the court reporter.)

21 BY MR. RUCKDESCHEL:

22 Q The highlighting on that document, who put it
23 there?

24 A I don't know.

25 Q Okay. My question regarding the 2003 paper,

1 Doctor, can you tell me which of the studies that are
2 considered and that go into the calculation of the
3 average exposure have filing of the edges of brake pads
4 occurring?

5 A I couldn't do that off the top of my head and I
6 doubt that it's discussed very frequently directly in
7 those studies. The filing of brakes during that time
8 era would have been a decision of the mechanic on a
9 case-by-case basis. And one has to infer that in the
10 more than 200 samples that were collected we properly
11 characterized the range of activities that are involved
12 in brake work so that somehow at the end of the
13 calculations, the end of the collection of all the data
14 and the resulting calculations, we believe we've
15 captured the various activities including the removal
16 of the wheel, opening the box, any grinding, any
17 sanding, any beveling that would have occurred.

18 You're aware that sanding and beveling should
19 not have been a standard and customary practice in this
20 time period between '78 and '85. It should not have
21 been necessary.

22 Q In 1986 the EPA put out a pamphlet regarding
23 exposure of mechanics to asbestos during brake
24 repair; is that correct?

25 A Right.

1 Q You're familiar with the pamphlet?

2 A Yeah. Well, there is two of them but I'm
3 familiar with both of them.

4 Q In fact we have both of them here so we'll
5 mark them both. Putting as Exhibit 5 the pamphlet
6 titled "Guidance For Preventing Asbestos Disease Among
7 Auto Mechanics," you're familiar with that document?

8 A Yes.

9 (Plaintiffs' Exhibit 5 was marked for
10 identification by the court reporter.)

11 BY MR. RUCKDESCHEL:

12 Q That documents discussing beveling of edges of
13 brake pads, does it not?

14 A If you remember the section where it is, if you
15 can point it back to me. I don't remember.

16 Q Pass it back and I'll take a look. It's right
17 here on the first page. I believe it's the second or
18 third sentence.

19 A Yes. Grinding and beveling friction products,
20 the document says:

21 "Grinding and beveling friction
22 products can cause even higher
23 exposures."

24 Q So at this point in 1986 the EPA at least
25 believed that beveling was a sufficient concern to

1 discuss it in their pamphlet, "Guidance For Preventing
2 Asbestos Disease Among Mechanics," correct?

3 MR. LANKFORD: Calls for speculation.

4 THE WITNESS: I wouldn't agree with that.

5 BY MR. RUCKDESCHEL:

6 Q Why not?

7 A Because the fact that they talk about it as
8 potentially historical issue doesn't mean they have
9 current concern for it.

10 Q Is there anything in the document that
11 indicates the EPA is discussing this historically as
12 opposed to a current concern?

13 A In my view it does, yes. It cites Rohl, 1976;
14 Lorimer, '76; Rohl, '77; Hatch, 1970; Hickish and
15 Knight, 1970. These are all papers that were done
16 almost a decade or more before this paper, and I know
17 from reading other literature that in fact it says that
18 the brakes no longer need to be ground and beveled for
19 the time period you told me to assume this
20 occurred, '78 to '85. It doesn't mean it never
21 occurred. I'm not saying it never occurred. I'm just
22 that saying by and large it didn't need to occur and it
23 was an unusual event. So that that's why I say I
24 believe they are talking about historical statement.

25 By the way, this document has many, many flaws

1 in it and in fact is outside of the purview really of
2 the EPA to be discussing occupational exposure. I'm
3 not sure why they wrote such a document.

4 Q Dr. Paustenbach, I got a pen here. I'd like
5 you to take that document and put a red line through
6 statements in it that you disagree with.

7 MR. LANKFORD: Well, you him -- how many pages
8 is the document?

9 MR. RUCKDESCHEL: The text of the document is
10 not long.

11 THE WITNESS: 16 pages.

12 BY MR. RUCKDESCHEL:

13 Q Please do it.

14 A Well, it's not so much a matter of disagreeing.
15 I'd be happy to answer your question.

16 "Grinding and beveling friction products can
17 cause even higher levels of exposure," is what is
18 stated here. That doesn't mean anything to a
19 scientist. So what I'm saying is this is a document
20 intended to communicate to the public in such a way as
21 to get their attention. You can't rely upon this as a
22 document upon which in this case or any other case you
23 can conclude whether or not people are appreciably
24 exposed. That would be wrong to do that. And that's
25 what I'm testifying to today. You should not, and I

1 will not attempt to use this document to talk about
2 causation or exposure. It's not meant to do that and
3 it's not a scientific peer-reviewed or even scholarly
4 document for doing that.

5 Q Doctor, are you suggesting that the EPA was
6 trying to create some sort of public hype about the
7 potential dangers to brake mechanics in publishing this
8 document?

9 MR. LANKFORD: Objection, form.

10 THE WITNESS: I don't know whether you want to
11 be inflammatory or not but I will tell you I have not
12 seen a scientific document or I wouldn't call something
13 a scientific document that relies on things like
14 television reports. Okay. And that's one of the
15 citations in this.

16 BY MR. RUCKDESCHEL:

17 Q Okay. But the citations regarding beveling
18 aren't to a television report, are they?

19 A I would challenge you to go back and find the
20 word "beveling" in each of the eight documents that
21 they cite here.

22 Q These are statements are statements of the
23 Environmental Protection Agency, correct?

24 MR. LANKFORD: Calls for speculation.

25 THE WITNESS: I'm not sure they are. I can't

1 endorse that. These might very well be the statements
2 of the contractor of US EPA.

3 BY MR. RUCKDESCHEL:-

4 Q What I'd like you to do, Doctor, is what I
5 asked you to do before. I'd like you to take a pen and
6 we'll start with this first section, Roman I,
7 "Mechanics' Exposure to Asbestos," and I'd ask you to
8 draw a red line with that red pen through any
9 statements there that you disagree with.

10 MR. LANKFORD: Let me object to the form. It
11 essentially is a compound question. You're asking him
12 to go through each of the statements made on various
13 different subjects and essentially asking him whether he
14 agrees with them. If you want to go through them one by
15 one and ask him, that may be proper. But essentially as
16 phrased it's a compound question, and it's also vague,
17 given the nature of each of the sentences.

18 BY MR. RUCKDESCHEL:

19 Q Okay. Let me rephrase the question to address
20 counsel's objection. I'd like you to start with
21 sentence No. 1:

22 "Friction materials such as brake
23 linings and clutch facings often contain
24 asbestos."

25 Is that statement factual accurate?

1 MR. LANKFORD: Objection, vague. Or objection
2 as to form in terms of time.

3 JUDGE KLINE: You may respond, Doctor.

4 THE WITNESS: For the year that this was
5 printed that statement is true as presented. And I
6 think there many, many true statements throughout this
7 document.

8 BY MR. RUCKDESCHEL:

9 Q And my question, and we'll get through this a
10 lot quicker if you just answer the question.

11 A Okay.

12 Q The next sentence:

13 "Millions of asbestos fibers can be
14 released during brake and clutch
15 servicing."

16 Is that statement factual accurate?

17 MR. LANKFORD: Objection, vague, are you saying
18 factually accurate -- vague as to time, overbroad,
19 factually accurate at the time made, factually accurate
20 time now.

21 JUDGE KLINE: Why don't you be a little more
22 definite in your question? What are we talking about?

23 BY MR. RUCKDESCHEL:

24 Q Dr. Paustenbach, I'm asking, all of these
25 questions I'd like you to assume that I'm asking you

1 about as of the date of the publication which is June
2 of 1986. Is that acceptable.

3 A Is that acceptable. It is to me.

4 Q You understand what I'm saying then. When
5 this document was published in June of 1986 when I
6 asked you the question if the statement is factually
7 accurate, what I'm saying was it factually accurate in
8 June of 1986. Do you understand?

9 A Sure.

10 MR. LANKFORD: For further clarification, are
11 you saying in terms of, because each one has a cite
12 after it, factually accurate in terms of its synopsis or
13 interpretation of the studies or simply true at the
14 time?

15 BY MR. RUCKDESCHEL:

16 Q I'm asking whether the statement itself is
17 factually accurate. Not whether it is an accurate
18 quotation of a study but whether it is in fact a
19 factually accurate statement.

20 JUDGE KLINE: You're asking whether or not that
21 statement was true at the time it was made --

22 MR. RUCKDESCHEL: That's correct.

23 JUDGE KLINE: From a scientific point of view.

24 MR. RUCKDESCHEL: That's correct.

25 THE WITNESS: Now, Your Honor, this is the

1 witness. You understand, I know where this is going so
2 we can do it if you like, but by going over sentences
3 and saying that they are in and of themselves accurate
4 does not also mean that they are informative. If that's
5 what you want me to do, I'll do it.

6 JUDGE KLINE: Answer the question in the best
7 way you can. You can explain your answer in any way you
8 want.

9 MR. RUCKDESCHEL: Judge, so we keep the record
10 clear I'd ask that he answer the question and then I'll
11 ask if he needs to explain so we have a clear record.

12 MR. LANKFORD: Well, the problem is, Your
13 Honor, with respect to each of these sentences, they are
14 very vague, ambiguous and overbroad in many ways as I'm
15 sure we'll learn here as he goes through them. And it's
16 impossible in many respects to give a response simply
17 yes or no. And the problem is with plaintiffs' counsel
18 demanding such a response. It's going to create a
19 misleading record.

20 JUDGE KLINE: Well, you can answer the question
21 in the best way you can, whatever that answer is. If
22 plaintiff feels that that is not sufficient he can ask
23 the question another way. But you're not, you can
24 answer the question as best you can in your professional
25 opinion.

1 BY MR. RUCKDESCHEL:

2 Q Dr. Paustenbach, the sentence that we're
3 referring to, "Millions of asbestos fibers can be
4 released during brake and clutch servicing," is that a
5 factually accurate statement in June of 1986?

6 A It's factually accurate. I don't think it's
7 informative for health risk assessment purposes.

8 Q Okay. The next sentence:

9 "Grinding and beveling friction
10 products can cause even higher
11 exposures."

12 Is that a factually accurate statement in
13 June of 1986?

14 A It's inaccurately written. It should say
15 higher airborne concentrations. But, the statement is
16 accurate but not informative.

17 Q The next sentence:

18 "Like germs, asbestos fibers are
19 small enough to be in visible and can
20 remain and accumulate in the lungs."

21 In June of 1986 was that a factually accurate
22 statement?

23 A Some asbestos fibers certainly are small enough
24 to be invisible and they may or may not have biological
25 significance.

1 Q Can they remain and accumulate in the lungs?

2 A Yes, sir.

3 Q "When you see a dust cloud during
4 brake work you are seeing clumps
5 containing thousands of fibers."

6 Is that a factually accurate statement in June
7 of 1986?

8 A It could be but as presented it is not entirely
9 accurate because it gives you an impression that all
10 clumps contain thousands of fibers. That may or may
11 not be true.

12 Q So you believe the EPA is overly broad in that
13 statement?

14 A Yeah, I think they are just careless in their
15 writing.

16 Q Careless, okay.

17 A If not careless, not terribly specific or
18 scientific.

19 Q The next sentence:

20 "Most of the smaller fibers will not
21 show up with the methods commonly used
22 for measuring asbestos levels in the air,
23 such as the method used to determine
24 compliance with the OSHA asbestos
25 standard, since most asbestos fibers and

1 brake dust are too small to be measured
2 by these methods."

3 Is that a factually accurate statement?

4 A It is.

5 THE VIDEOGRAPHER: We need to change tape.

6 MR. RUCKDESCHEL: Okay. Would you like to take
7 a break since we're an hour in?

8 THE WITNESS: No.

9 THE VIDEOGRAPHER: This concludes Tape 1. Off
10 the record. The time is 11:26.

11 (Discussion off the record.)

12 THE VIDEOGRAPHER: Here begins Tape 2. We're
13 on the record. The time is 11:30.

14 BY MR. RUCKDESCHEL:

15 Q Rather than continuing sentence by sentence
16 through all of Section 1, is it acceptable to you to
17 read the remaining three paragraphs and tell me any of
18 the sentences that you believe are factually
19 inaccurate?

20 A All I would say is it's a hodgepodge of truths
21 and untruths that aren't too informative. For
22 instance, in the first sentence it says:

23 "Asbestos released in the air
24 lingers around a garage long after a
25 brake job is done."

1 That's possible, there's no question about
2 that, that the small fibers can stay in the air for a
3 while and can be breathed in by everyone inside a
4 garage. I suppose that's possible, too, including
5 customers. It has to do with each case, with whether
6 or not the customers are in proximity and whether or
7 not the fibers are still there.

8 So sure, if you want to just write a bunch of
9 inflammatory things that aren't informative in order to
10 tell the public, hey, there may be a hazard here,
11 that's fine. It depends what you want to do with the
12 document. If you want to use this document or EPA
13 wants to use it simply to alert the public about the
14 possible hazards of brake dust, that's fine.

15 I'm just saying I wouldn't rely on it nor
16 would I suggest relying on it in a case like this. If
17 you want I'll go back over each of the paragraphs
18 saying that.

19 Q You said there were some truths and untruths.
20 And I'm just asking you, can you identify for me the
21 untruths?

22 A Well, it's possible there are no customers in
23 proximity of the brake job. Therefore, that would be
24 an untruth.

25 It's an opinion in the second paragraph whether

1 or not:

2 "In situations where asbestos
3 exposures cannot be eliminated entirely,
4 they should be reduced to the lowest
5 possible level."

6 I don't know what to say about that.

7 Q Well, do you disagree with the proposition
8 that it's always better to reduce the level of asbestos
9 in the air?

10 MR. LANKFORD: Overbroad.

11 THE WITNESS: I think the Supreme Court's ruled
12 on that on the benzene decision for one thing. Yes, I
13 think there is a point where society and regulatory
14 agencies conclude that it's a misuse of taxpayer's money
15 to attempt to take concentrations to inordinately low
16 levels. I think that's very clear.

17 So even though this is a nice statement for
18 them to make, from a societal standpoint this isn't the
19 way we choose to do business.

20 BY MR. RUCKDESCHEL:

21 Q Where does society draw that line? And I'm
22 going to ask you after society where we draw that line,
23 where the regulatory agencies draw the line, and then
24 where you draw that line.

25 MR. LANKFORD: And what is the question?

1 BY MR. RUCKDESCHEL:

2 Q Dr. Paustenbach was talking about there
3 becomes a point where as a society and as regulatory
4 agencies we believe that it's no longer --

5 A The benefits are vanishingly small for the
6 cost.

7 Q And so my question for you, and let's phrase
8 it in terms of risk.

9 A Right.

10 Q Where does society draw that line with respect
11 to exposure to asbestos dust where, do the regulatory
12 agencies draw the line, where does Dennis Paustenbach
13 draw that line?

14 MR. LANKFORD: Overbroad, objection as to form.
15 Same for any product and any fiber type?

16 BY MR. RUCKDESCHEL:

17 Q Yeah, we are talking about risk here, we're
18 not talking about products or fiber type. I'm
19 assuming, Dr. Paustenbach, that your opinion regarding
20 fiber type doesn't make any difference with regard to
21 the question of when is the risk sufficient that it
22 would be good to get the number of fibers down?

23 MR. LANKFORD: Without regard to products. So
24 there are two parts to the question.

25 BY MR. RUCKDESCHEL:

1 Q Do you agree?

2 MR. LANKFORD: Well, objection as to form.

3 THE WITNESS: Yeah, we don't have a proper
4 question.

5 BY MR. RUCKDESCHEL:

6 Q Okay.

7 A But I can do it, do you want me to talk about
8 the spirit of your question?

9 Q Let me ask the question again.

10 A Okay.

11 Q Is a 1-in-1000 risk of mesothelioma for
12 crocidolite asbestos exposure the same concern from a
13 societal perspective as a 1-in-1000 risk of
14 mesothelioma from chrysotile asbestos?

15 A Probably not.

16 Q Why not?

17 A Because the certainty with which we can predict
18 a 1-to-1000 risk of crocidolite is quite different than
19 what we can predict with chrysotile, quite different.
20 So society, as reflected by the agencies when they
21 review it, will probably conclude that those risks are
22 different.

23 Q Currently all of the United States government
24 agencies, and in fact, yeah, all of the United States
25 government agencies treat the risk the same for

1 different fiber types; is that correct?

2 MR. LANKFORD: Overbroad.

3 BY MR. RUCKDESCHEL:

4 Q Current positions?

5 A The question is not worded properly. I think I
6 know what you mean but the question isn't one I can
7 identify.

8 Q Dr. Paustenbach, can you identify for me a
9 regulatory agency of the United States government that
10 treats the risks of different fiber types of asbestos
11 differently?

12 A That's a different question.

13 Q Okay. Answer that question then.

14 A Currently because they haven't been reviewed in
15 about ten years or more, they are treated for
16 regulatory purposes the same.

17 Q Okay. Now I want you to assume that you are
18 scientifically, you are presented with sufficient
19 scientific evidence that you are comfortable there is
20 an accurate estimation of a 1-in-1000 risk in a
21 particular situation to crocidolite exposure, and that
22 you are also presented with what you consider to be
23 scientifically sufficient evidence that there is a
24 1-in-1000 risk of mesothelioma with exposure to
25 chrysotile in a different situation.

1 From a societal standpoint, from a risk
2 assessment standpoint are those risks the same?

3 MR. LAWYR: Objection. Incomplete
4 hypothetical, risk versus what benefit?

5 MR. RUCKDESCHEL: Counsel, the proper objection
6 in a deposition in Florida is to say objection.

7 JUDGE KLINE: Well, if the witness can respond
8 to it, or if he can't he will tell us he can't respond
9 to it. It's not a question he can respond to. I don't
10 know. What does the witness say?

11 THE WITNESS: As I heard the question, you
12 asked me to assume that both fibers cause mesothelioma,
13 that was known, and if in fact it was known that those
14 were accurate risks, those risks would in fact then be
15 the same.

16 BY MR. RUCKDESCHEL:

17 Q Okay. Doctor, do you believe that the EPA has
18 an agenda to inflame the public or to exaggerate the
19 potential risks of certain situations?

20 MR. LANKFORD: Can I have that read back?

21 (Record read.)

22 MR. LANKFORD: Objection as to form.

23 THE WITNESS: I think the EPA has an extremely
24 worthwhile role in society. And the question you've
25 asked has been debated in probably thousands of

1 different articles and newspaper exposTs. So I'm not
2 going to weigh in on that today. I'm just telling you
3 that that's been discussed many places.

4 BY MR. RUCKDESCHEL:

5 Q You weighed in on it in one of those newspaper
6 exposTs?

7 A Hard to say. You'd have to be specific.

8 MR. RUCKDESCHEL: Let me show it to you. We'll
9 mark as Exhibit 6.

10 (Plaintiffs' Exhibit 6 was marked for
11 identification by the court reporter.)

12 BY MR. RUCKDESCHEL:

13 Q Dr. Paustenbach, I've put in front of you a
14 copy of the New Jersey Star Ledger, quote:

15 "When corporations need an expert,
16 he gladly answers the call."

17 Are you familiar with this article?

18 A I am.

19 Q And you're quoted in this article?

20 A Yes, sir.

21 Q And on the second page of this printout is a
22 quote that says, quote:

23 "I happen to think, if there is a
24 bias in the world, and I guess there is,
25 it goes both ways. The agencies say they

1 are protecting the public health and
2 indeed they are. But they also need to
3 make things exciting and look productive,
4 otherwise they are not going to receive
5 the funding they want to receive."

6 Did I read that correctly?

7 A Yes, sir.

8 Q Is that an accurate quotation of you?

9 A I don't know. I'm not going to disagree. It
10 may or may not be.

11 Q Okay. Do you believe that the June 1986
12 document that we've been discussing, "Guidance For
13 Preventing Asbestos Disease Among Mechanics," marked as
14 Exhibit 5 in this deposition is an example of the EPA
15 trying to make things exciting and look productive?

16 A I can tell that you that this particular
17 document certainly doesn't reflect a balanced view of
18 the hazards to auto mechanics based on what was known
19 at the time.

20 Q So it's your position that in publishing this
21 document the EPA published an unbalanced view of the
22 public health situation regarding asbestos disease and
23 brake mechanics?

24 A One has to conclude that. For example, one of
25 the most pivotal pieces of work funded by the

1 government, by the predecessor of EPA, by the Public
2 Health Service, is Lynch. It's not even mentioned in
3 here.

4 As I recall, the conversion to fosterite isn't
5 mentioned in here. There are no studies that were
6 focused on this very issue beyond the original ones by
7 Mt. Sinai that are discussed in here. So I don't see
8 how anybody could claim it was balanced and it clearly
9 was not meant to be a scientific, balanced view of the
10 issue.

11 Q You would agree the EPA published this
12 document to raise awareness to automobile mechanics of
13 potential hazards of performing brake repair work?

14 A Sure.

15 Q And that's part of the function of the EPA?

16 A Actually it's not. It's really a function of
17 OSHA. I'm surprised that EPA got into this issue.
18 OSHA would be clearly the agency responsible for this
19 issue. If they talked about the release to the ambient
20 air then that would make sense. I don't know why EPA
21 is weighing in on this in this document.

22 Q Do you believe that brake mechanics should
23 have been presented with the information contained in
24 this paper?

25 MR. LANKFORD: Objection as to form.

1 JUDGE KLINE: You can respond.

2 THE WITNESS: I don't choose to take issue with
3 EPA's decision to do that. I mean I would have
4 preferred they give a more balanced view and I probably
5 would have preferred OSHA write the document in the way
6 they wanted to write the document. But if EPA chose to
7 want to do this I'm not going to take issue with that.

8 BY MR. RUCKDESCHEL:

9 Q One of the fundamental premises on which our
10 society is founded is the right of each of us to make
11 decisions about our own body and our own self?

12 MR. LANKFORD: Well, objection as to form.

13 BY MR. RUCKDESCHEL:

14 Q Would you agree?

15 A I don't have a problem with that statement.

16 Q In fact, you've written about that type of
17 issue in your early writings in the '80s?

18 A I did indeed. And I promoted teaching it in
19 colleges.

20 Q And part of being able to make an informed
21 decision about how to conduct your life is
22 understanding what the facts are that you should
23 consider when making a decision?

24 A That's what I've written about and taught over
25 the years.

1 Q I understand. And I want to digress,
2 Dr. Paustenbach, into a subject that is related to that
3 issue and I want to preface it by saying that --

4 Let's just go off the record for a minute?

5 THE VIDEOGRAPHER: Off the record.

6 (Discussion off the record.)

7 THE VIDEOGRAPHER: Back on record. The time is
8 11:44.

9 BY MR. RUCKDESCHEL:

10 Q Doctor, you have performed in your career work
11 for companies that are facing litigation or regulatory
12 action regarding pollution from chromium 6. Is that --

13 A That's fine.

14 Q And you did so in New Jersey for a group of
15 three firms and then in California for at least Pacific
16 Gas & Electric?

17 A That's correct.

18 Q In connection with that work, and I'm just
19 going to call that generically the chromium work. Is
20 that acceptable?

21 A Sure.

22 Q In connection with your chromium work you
23 performed a number of experiments?

24 A Yes.

25 Q And some of those experiments involved

1 exposing yourself and others to some levels of
2 hexavalent chromium?

3 A True.

4 Q In one of the studies you and a number of
5 other people drank hexavalent chromium over a number of
6 days and then measured the amount of hexavalent
7 chromium in your Your Honor and blood?

8 A True.

9 Q And you subsequently published some papers
10 about that test?

11 A True.

12 Q You also performed an experiment where you and
13 others sat in a hot tub full of hot water that had been
14 laced with hexavalent chromium, spiked, I don't know
15 what the right word is, but had hexavalent chromium in
16 it?

17 A Yes.

18 Q And then you measured whether the hexavalent
19 chromium got into your body?

20 A True.

21 Q When you did those experiments were you
22 convinced that it did not pose a meaningful risk to
23 your health?

24 A Sure.

25 Q And you were convinced of that before you did

1 the experiments?

2 A Sure.

3 Q Did you explain to the other subjects of that
4 experiment the potential risk of participating in the
5 experiment?

6 A Of course.

7 Q What types of things did you explain to them?

8 A Well, first, keep in mind I only selected
9 people or asked for volunteers of those that I thought
10 could be informed. And that means they were all
11 trained as scientists that would be aware of what I was
12 saying, and in their own right could make their own
13 decisions independent of what I was saying.

14 My recollection is they were all were either
15 practicing toxicologists or trained toxicologists or
16 physicians. So I tried to be careful to include only
17 people that were already in the field. That way the
18 issue of informed consent, you know, was very easy to
19 get over that hurdle.

20 We also had a written disclosure and an
21 oversight board, a medical review board that reviewed
22 the protocol and approved it. And my recollection is
23 that they signed also a statement that they understood
24 what the study was about and whether there were any
25 risks associated with it. It was easy for me to get

1 involved because others had done similar work before me
2 in Italy. So it isn't something I had to guess at
3 whether or not there was much of a hazard here.

4 Q If you were convinced that there was no risk
5 to your health or the health of the other people that
6 were going to take part in these experiments why was it
7 necessary to give them that information?

8 A Well, I think from a practical standpoint this
9 is what society would like to see. And also from a
10 practical standpoint we live in a litigious society.
11 So I think for both reasons it was the right thing to
12 do.

13 Q At the time that the first ingestion study,
14 the study where you drank the chromium was done, had
15 Dr. Zhang's 1997 paper been published?

16 A His first paper?

17 Q No, the second paper.

18 A I don't recall the timing exactly. I thought
19 that Zhang's paper came after we did the study. That's
20 my recollection.

21 Q And all I'm trying to establish is that at the
22 time the studies were done there was at least the --

23 Let me go ahead and mark it since we're
24 talking about it.

25 (Plaintiffs' Exhibit 7 was marked for

1 identification by the court reporter.)

2 BY MR. RUCKDESCHEL:

3 Q At least the earlier paper by Zhang,
4 Z-H-A-N-G, that the ATSDR had translated in the
5 literature; is that correct?

6 A I was aware of the paper, yes.

7 Q Okay. And that paper concluded that there was
8 an increased risk of stomach cancer to individuals who
9 drank water contaminated with hexavalent chromium in
10 the area that Dr. Zhang studied?

11 A Well, Yeah, but you have to look at the dose
12 and duration and what else they were exposed to and
13 whether the study made any sense. And as his follow-up
14 paper shows the results didn't make any sense, and we
15 were aware of that at the time, so...

16 Q Sure. And in fact, your team wrote drafts
17 to the follow-up paper of Dr. Zhang?

18 A Well, we certainly wrote Dr. Zhang and asked
19 him if he was aware of these shortcomings in his study,
20 at which point he said yeah, I guess I'm aware of them
21 now and I agree there's a problem here.

22 Q And your team hired him?

23 A No, You know, Mr. Praglin I think said we've
24 hired him. It's my recollection he may have been paid
25 some amount as a consultant. But I'd hate to say we

1 hired him. I don't know. He received some
2 compensation for the time spent looking at his old
3 data.

4 Q Your firm tracked him down in China?

5 A That's true.

6 Q You located him, you hired him as a consultant
7 and then worked with him on re-analyzing the data from
8 his earlier paper?

9 A I'd have to go back and look at the data but I
10 think that's approximately correct.

11 Q Okay.

12 A I wouldn't want to leave the impression we had
13 to pay him consulting moneys to re-evaluate his data.
14 I don't recall exactly how that went. But be that as
15 it may, I think he received some moneys for his time.

16 Q And the documents that Mr. Praglin has marked
17 and shown you at deposition are the documents you're
18 referring to?

19 A In part.

20 Q Okay.

21 A I mean there is some things Praglin showed me
22 that were complete and others not but --

23 Q I understand.

24 A Let's assume that you're being forthright and
25 I'll just say yes, I'm referring to documents Praglin

1 showed me.

2 Q And I'm not trying to get into a discussion of
3 the involvement of your employees with re-analysis of
4 Dr. Zhang's data to the extent there was any
5 involvement. I'm simply trying to establish that at
6 the time the ingestion studies were performed,
7 Dr. Zhang's earlier paper at least raised in the
8 scientific literature a concern that hexavalent
9 chromium in sufficient dose could cause stomach cancer
10 when ingested?

11 A I don't know if I want to agree with that
12 because I don't know what fraction of the scientific
13 community gave that study serious consideration. I
14 just don't know.

15 Q Okay.

16 A Well, I mean studies out of China at the time
17 involving water pollution and even today are suspect
18 unless all the other contaminants in the water are
19 looked at, both microbial and chemical. And there
20 happens to be a high background incidence of stomach
21 tumors in China irrespective of chromium. And he
22 acknowledged that and I think everybody that studies
23 that in China acknowledges that. And so I don't know
24 how many people in the scientific community took that
25 relationship he thought he saw very seriously. I just

1 don't know.

2 Q Okay. You would agree that the scientific
3 community tended to focus more on Dr. Zhang's earlier
4 paper than on his retraction even after the retraction
5 was published?

6 A I couldn't say that. This hasn't been studied
7 very carefully except for the California Government
8 Blue Ribbon Panel since we did our work.

9 Q Okay. You talked about selecting
10 toxicologists to approach with whether they would
11 participate in the study because they were sufficiently
12 sophisticated to be able to make an informed decision.

13 A I mentioned that.

14 Q You wouldn't have asked, for example, an
15 individual working in the mailroom if they wanted to
16 participate?

17 A I wouldn't have chosen to do that. I wouldn't
18 take issue with other people maybe. But personally I
19 chose not to do that.

20 Q And that's because an individual who did not
21 have the level of sophistication of a practicing
22 toxicologist might not be able to understand or
23 comprehend the various issues needed to give an
24 informed consent about participating in the hexavalent
25 chromium studies?

1 A Certainly when you're asking people to take in
2 doses that are not standard and customary, then I think
3 it's good for them to be fully informed.

4 Q And would you have asked somebody with an
5 education equivalent to Joe Mallia to participate in
6 your hexavalent chromium study?

7 A I could have. I just didn't think at the time
8 it was the right thing to do. That's all.

9 Q Why not?

10 A Well, because I just felt like the best
11 approach to doing a volunteer study to a chemical that
12 deserves evaluation should have as much informed
13 consent at possible. That was just my personal view
14 about it. Most studies, of course, aren't done that
15 way.

16 I mean we do almost all the pharmaceutical
17 studies involving people that aren't physicians or
18 aren't toxicologists or aren't pharmacologists and
19 there are review boards that say that's a perfectly
20 acceptable way and we need to do it that way to get a
21 fair representation of the differences in responses in
22 society. So it's not that uncommon for people who
23 don't have special education to be involved in these
24 kind of studies. I just chose not to do that.

25 Q Sure. But this was a study performed in

1 connection with litigation?

2 A That's right.

3 Q It wasn't a study designed to see whether we
4 could come up with a better protocol for treating
5 cancer?

6 A No, but of course this work is going to be
7 relied upon when the time comes when we choose to
8 regulate chromium in water.

9 Q Sure. I understand. But that's an indirect
10 benefit to society?

11 A In this case it was an indirect benefit.

12 Q All right. And you've written about the
13 difference between direct and indirect benefits to
14 individuals and its relation to what level of risk
15 we're willing to accept as a society?

16 A Voluntary and involuntary is what you're
17 referring to I think.

18 Q I was going to get to that, but you've also
19 written about direct and indirect, have you not.

20 A Perhaps. I don't recall. I may have. I've
21 written quite a bit.

22 Q Okay. And you talk about that in your
23 writings, about how we as a society look at risk and
24 what is and what is not acceptable?

25 A That is a different issue and I talked about

1 that a lot.

2 Q Okay. Doctor, I'd like to talk with you for a
3 minute -- well, before I move on, your team, it was
4 McLaren/Hart when you did the chromium studies, right?

5 A Yes.

6 Q Your team at McLaren/Hart also performed a
7 study with a mannequin in a shower?

8 A That's right.

9 Q Did you do a human study with a shower?

10 A No.

11 Q Why not?

12 A Because we needed somebody to stand still in
13 the shower for a long period of time and I didn't think
14 it was necessary. Normally all we wanted to do was
15 measure the airborne concentrations of a person. It
16 was irrelevant really. It just needed someone or
17 something to be 6 feet tall and to be able to hang
18 these sampling devices on them. We could have used the
19 human. It just would have been boring work and we
20 would have had to heat the water I suppose more than we
21 did, so...

22 Q Would you have been more concerned with safety
23 in a human study in a shower for hexavalent chromium
24 given the fact that inhalation is recognized as a human
25 carcinogen?

1 A Oh, no. Because it's not volatile.

2 Q Okay.

3 A So it wouldn't be a hazard anyway.

4 Q So it wasn't a safety concern that caused you
5 to use a mannequin?

6 A No, no. It was a boring concern.

7 Q Did you disclose in the chromium papers that
8 the work was funded by the companies you were working
9 for?

10 A You know, Praglin asked me that and I told him
11 we'd have to look at each paper. As I recall, most
12 were not. As I recall. But we'd have to go back and
13 look at that. And as I told him, the reason why was at
14 the time it was not standard and customary practice.
15 Although I was one of the first people to ever start
16 with the level of disclosure that you see in my papers
17 today, it really, as I mentioned to him, was dependent
18 on journal and journal editor as to whether or not they
19 wanted to do it. I wouldn't have any problem
20 disclosing and I did I believe for some of them and
21 certainly the later papers.

22 Q Did you disclose, did your firm disclose its
23 involvement in the writing of the second Zhang paper?

24 A Well, I don't recall that we did. But there is
25 correspondence on that I think. My recollection is

1 that Zhang said that he would prefer to have exclusive
2 authorship. And I think I testified to Mr. Praglin
3 that at the time it was not thought to be an acceptable
4 thing to do, for the Chinese communists to be doing
5 collaborative work with those of us in the west. And
6 that was possibly even documented in some of the
7 Chinese exchange with him. But it's very clear
8 ultimately he did not want to have us disclosed in his
9 last paper.

10 Q When you subsequently cited Zhang in his
11 second paper and other works did you note that your
12 firm had been involved in the authorship of the paper?

13 A We weren't authors on the paper ultimately, and
14 that wouldn't have been standard and customary practice
15 to do that.

16 Q But your firm did draft various versions of
17 the paper?

18 A Well, I don't know if that is a proper
19 characterization. Remember, he was writing to us in
20 Chinese. So the drafts were his, and we made
21 modifications back and forth.

22 I fully anticipated we'd be co-authors on the
23 paper. I didn't appreciate his concerns about the
24 government, the government's views that they may not
25 want him to interact with westerners on this research.

1 Q Are you aware of the existence of any of the
2 Chinese communications from Dr. Zhang?

3 A Yes, I am as a matter of fact. I was shocked
4 at the amount of correspondence there was and that
5 Mr. Praglin failed to discuss it the many times he said
6 there wasn't any. He had been presented apparently 600
7 pages of Chinese and yet he continues to say it doesn't
8 exist. I don't quite understand what he's talking
9 about. But he has all 600 pages.

10 Q You got involved in the asbestos litigation in
11 the middle of 2001?

12 A It must be very close to that.

13 Q That's sort of the beginning of the
14 chronology?

15 A Perhaps.

16 Q You get a call from Darrell Grams at Ford?

17 A Yes, I did.

18 Q And you'd worked with Mr. Grams previously
19 when he was at Dow or working for Dow?

20 A He was outside counsel.

21 Q And you were involved with him at the Silicon
22 breast implant litigation?

23 A That's correct.

24 Q Mr. Grams calls you up and he says are you
25 interested in looking at some papers regard regarding

1 asbestos and brakes?

2 A That's true.

3 Q And he sends you a few papers?

4 A That's my recollection.

5 Q You read those papers and call him back and
6 say I'm interested?

7 A Yes.

8 Q He then has you come out to Detroit and you
9 meet with Mr. Grams and with lawyers for General Motors
10 and Chrysler as well?

11 A That's my recollection.

12 Q After that meeting it's decided that, you
13 know, you all do a little meet and greet and decide,
14 well, I'd like to work with you and you'd like me to
15 work with you and so you're hired, even though the
16 words "you're hired" aren't said?

17 A Were asked to do additional work.

18 Q Okay. And that additional work involves
19 getting yourself educated on issues relating to
20 asbestos, and particularly asbestos and brakes?

21 A That's true.

22 Q You're sent a bunch of materials by the
23 lawyers from Ford, General Motors and Chrysler?

24 A That's fair.

25 Q And you also go out and collect some other

1 material from the medical literature and other sources?

2 A That's also fair.

3 Q It takes you about six months to get up to
4 speed on those issues.

5 A Yes.

6 Q So if you started in approximately the middle
7 of 2001 in this process, we're talking early 2002, the
8 preliminary education is done.

9 A Okay.

10 Q Is that fair?

11 A I'm going to say it's reasonably close.

12 Q Okay. And that's what I'm looking for,
13 reasonably close. Hand grenade stuff here.

14 You then spend another six months or so
15 preparing yourself for the possibility of testifying in
16 lawsuits?

17 A Probably fair.

18 Q All right. And that takes us pretty much till
19 the middle, approximately the middle of 2002.

20 A Again, I'd have to go back and look at the
21 records but I'll assume since it sounds like you're
22 relying on prior testimony, this is close.

23 Q All right. And some point around that time,
24 around a year after you're contacted you call up --

25 Let's go off the record.

1 THE VIDEOGRAPHER: Off the record. The time is
2 12:05.

3 (Discussion off the record.)

4 THE VIDEOGRAPHER: Back on the record.

5 BY MR. RUCKDESCHEL:

6 Q Sometime in mid 2002 or about a year after
7 your first contact with Mr. Grams, you have a
8 discussion with your clients about writing some papers?

9 A That's about right.

10 Q And that work then leads to the publication of
11 two papers, your 2003 paper about dust levels and your
12 2004 paper regarding state of the art?

13 A I say to the client this story is so
14 interesting and has yet to have been put together in
15 one place, that I thought it made sense to share it
16 with the scientific community. So they agreed to
17 support that work.

18 Q Okay. And they in fact paid for that work?

19 MR. LANKFORD: Objection.

20 THE WITNESS: By and large that's right.

21 BY MR. RUCKDESCHEL:

22 Q Okay. And am I correct, you say by and large.
23 I've seen testimony before that you didn't bill all the
24 time. Is that the reason why you say by and large they
25 paid for it?

1 A That's right.

2 Q Okay. Did any money change hands between any
3 party other than General Motors, Ford and Chrysler
4 paying Exponent?

5 MR. LANKFORD: Vague, overbroad.

6 THE WITNESS: I think your question is did any
7 other firms other than those three pay any anything
8 towards the work needed to write those papers.

9 Q Right.

10 A No. The answer is no.

11 Q Okay. Did Exponent write a letter to General
12 Motors and Ford and Chrysler and say, hey, we're going
13 to give you guys a discount, we're not going to bill
14 all our time?

15 A No, no such letter was written. I know this
16 sounds incredible to a lawyer but we don't bill all of
17 our time when it comes to doing scientific writing.
18 It's so painstaking that we just are too embarrassed to
19 charge clients for the number of hours we invest in
20 writing papers. It just seems not right. I know
21 lawyers don't feel that way. I know they usually
22 charge for every minute that they write, but we don't.
23 It's just too much, it doesn't seem fair.

24 Q Here's what I'm getting, because it's seems
25 like you're muddling.

1 A I can't imagine that, I couldn't have been any
2 more clear.

3 Q Let me explain why. Because the paper says it
4 was funded in part by Ford, General Motors and
5 Chrysler.

6 A Right.

7 Q Did Exponent account for the time that was
8 spent that wasn't billed, and write that off as a
9 business expense?

10 MR. LANKFORD: Objection, calls for
11 speculation.

12 JUDGE KLINE: You may response if you can.

13 THE WITNESS: You can't write these things off
14 as business expenses if they are not income. But
15 secondly, yes, I guess in a way Exponent ends up
16 funding, if you will, that work, because you're not
17 charging the client the money. In a way that's true.

18 BY MR. RUCKDESCHEL:

19 Q Now that's something that you do because you
20 don't want to charge the client the full freight?

21 A I guess that's, I think that's what I just said
22 yes.

23 Q Was there a restriction from General Motors,
24 Ford and Chrysler on how much could be billed?

25 A No, no, it was pretty much the decision of each

1 of us authors to say, guys, we've spent enough time,
2 billable time on this. Whatever we do here is for our
3 own nuance, if you will, with respect to writing a
4 precise paper.

5 Q Was it a professional courtesy to Ford,
6 General Motors and Chrysler that you didn't charge
7 them?

8 MR. LANKFORD: Asked and answered.

9 THE WITNESS: No, I put professional courtesy I
10 think in a different box. It's a sense of right and
11 wrong with respect to what is the proper amount of time
12 to spend on these issues.

13 I happen to be a very, very picky writer. I'll
14 do 8, 10, 12 revisions of most of my writing. I can't
15 feel good about charging clients for all that. That's
16 personal choice of mine. Either I'm a poor writer or I
17 want the text to be extraordinarily clear. It's one or
18 the other. But I don't feel comfortable charging for
19 all my writing time.

20 Q Were there restrictions of these two papers?

21 A Of course there were.

22 Q Do the drafts exists?

23 A No.

24 Q Why not?

25 A You never keep drafts. You go through so many

1 drafts, especially on a paper of that size. You would
2 never keep them. It would be confusing for one thing.
3 Why would you keep them?

4 Q Were drafts that were submitted to the
5 publisher returned prior to the final publication of
6 the paper?

7 A You wouldn't call them drafts at that point.
8 You would call it your submitted paper.

9 Q Okay.

10 A And then there's a revised paper based on the
11 comments.

12 Q Do copies of the submitted papers exist?

13 A No.

14 Q Why not?

15 A Because there would be no reason to keep them.

16 Q Since starting to work with General Motors,
17 Ford and Chrysler in brake cases how many cases have
18 you been involved with where an individual with
19 mesothelioma was asserting a claim against General
20 Motors, Ford or Chrysler?

21 THE WITNESS: Can I hear that back, please?

22 (Record read.)

23 THE WITNESS: I couldn't say for sure.

24 BY MR. RUCKDESCHEL:

25 Q Is it more than 10?

1 A Yes.

2 Q Is it more than 20?

3 A I would think so.

4 Q Is it more than 50?

5 A I think so.

6 Q How many of those, is it more than a hundred?

7 A I don't think so. I'm virtually certain it is
8 not a hundred.

9 Q How many of those cases are reported in the
10 medical literature?

11 MR. LANKFORD: Calls for speculation.

12 THE WITNESS: I don't know. And I don't know
13 how you'd know.

14 BY MR. RUCKDESCHEL:

15 Q Let me ask it then a different way: Are you
16 aware of any of those cases being reported in the
17 medical literature?

18 A Well, it would be the same answer. I've never
19 thought about whether or not they were picked up in any
20 of the epidemiology studies. Nor do I know if they've
21 been reported in case report. But I doubt if the ones
22 I worked on have been in case reports. They may have
23 been caught in an epi study.

24 MR. RUCKDESCHEL: Let's go off the record.

25 (Discussion off the record.)

1 MR. RUCKDESCHEL: Okay. Madam Reporter, could
2 you read back the last partial question?

3 THE REPORTER: There was no partial question.

4 MR. RUCKDESCHEL: Okay.

5 THE WITNESS: Maybe it's a good time for lunch.

6 BY MR. RUCKDESCHEL:

7 Q How many of the cases of the 50 to 100
8 mesothelioma cases that you have reviewed while working
9 for Ford, General Motors and Chrysler are individuals
10 that had no other demonstrable exposure to asbestos?

11 MR. LANKFORD: Misstates testimony and calls
12 for speculation.

13 THE WITNESS: I don't know, I've not tried to
14 figure that out.

15 BY MR. RUCKDESCHEL:

16 Q Did Mr. Mallia have exposure to asbestos other
17 than from brakes?

18 A It's not apparent to me that he did. This is
19 one of those situations where he may have been exposed
20 and he was unaware of it as Roggli's papers talk about,
21 and/or he has an idiopathic meso.

22 Q And Dr. Roggli's papers discuss the fact that
23 examination of lung tissue of individuals who have died
24 from mesothelioma often reveals that they have
25 quantities and types of asbestos in their lungs that

1 show they were exposed to asbestos even though they
2 were unaware of it?

3 A Yeah, usually significant quantities..

4 Q And of the 10 -- let me start over. In the
5 Spirtas paper from the 1980s, Spirtas concludes that
6 90 percent of the mesotheliomas that they looked at in
7 their paper had a demonstrable exposure or had a known
8 exposure to asbestos.

9 The individuals Dr. Roggli studied would be in
10 the 10 percent that didn't; is that correct?

11 MR. LANKFORD: Form.

12 THE WITNESS: It depends on which study you're
13 talking about. He has both kinds of people in his
14 studies. But all he mentions is that he's surprised at
15 people that claim they weren't exposed and they had
16 significant burdens. That's the take-home message.

17 Q And in the Spirtas study, the 10 percent that
18 Spirtas says these people didn't appear to have any
19 exposure to the asbestos, those are the types of people
20 that Dr. Roggli studied and he found out that they
21 actually did?

22 Yes.

23 (Discussion off the record.)

24 MR. RUCKDESCHEL: That was distracting.

25 BY MR. RUCKDESCHEL:

1 Q Now have you asked Ford or General Motors or
2 Chrysler how many prior claims they have had where
3 individuals with mesothelioma with no other known
4 exposure to asbestos brought lawsuits against them?

5 A I've not asked that question.

6 Q Why not?

7 MR. LANKFORD: Calls for speculation.

8 JUDGE KLINE: If he knows why not.

9 BY MR. RUCKDESCHEL:

10 Q No, I'm just asking why he hasn't asked.

11 A Well, what you're asking is why haven't I asked
12 them to do some sort of mini epi study to refute what
13 Lemen and Engleman claim must be occurring because they
14 think that there are too many meso cases for the number
15 of brake mechanics that are alive. And if you add up
16 all the plaintiffs' cases they believe that the math
17 doesn't work. That's really what you're asking me.

18 Q Well, that is sort of the substance of what
19 I'm getting at, is one could go back and look through
20 the materials that were collected in litigation from
21 prior cases.

22 A That's right, you could.

23 Q And there's recent paper that was published
24 regarding household mesothelioma where the author,
25 Albert Miller -- and I'll mark it as Exhibit 8 since

1 we're talking about it.

2 (Plaintiffs' Exhibit 8 was marked for
3 identification by the court reporter.)

4 BY MR. RUCKDESCHEL:

5 Q Are you familiar with this paper?

6 A I haven't read it yet.

7 Q Dr. Miller in this paper went back and looked
8 at 32 household exposure mesothelioma cases that he
9 collected from the historical archives of plaintiff law
10 firms that are involved in the asbestos litigation.
11 And one of the -- and I'm not asking you to opine on
12 this but one of the things that Dr. Miller suggests is
13 that records from litigation may be a valuable
14 repository of information about medical conditions.

15 A Mm-hmm.

16 Q Would you agree that that's a plausible, that
17 that's true, that they could be a valuable source of
18 information?

19 A I wouldn't rule it out.

20 Q Okay. And in fact in cases like this case
21 there is substantial investigation into the
22 occupational exposure history of the plaintiff?

23 MR. LANKFORD: Calls for speculation.

24 THE WITNESS: Is your question in cases like
25 this where there is a lot of historical information that

1 it might be useful to make a log of these kind of
2 people?

3 BY MR. RUCKDESCHEL:

4 Q Sure.

5 A It might be useful to do that.

6 Q And you haven't done it?

7 A No, I haven't done it.

8 Q And you would agree there are three broad
9 possibilities of what could happen with a systemic
10 review. One, it could provide support for the position
11 of Ford, General Motors and Chrysler that their
12 products don't cause asbestos disease.

13 A It's a possible outcome.

14 Q One is it would refute that position and
15 provide evidence that their products do cause asbestos
16 disease?

17 A If you were to have only known exposure to dust
18 from their products that would be one possible outcome.

19 Q And the middle outcome is we could be left in
20 the state we are, which is the evidence is equivocal as
21 to whether, as to whether the products manufactured by
22 Ford, General Motors and Chrysler are capable of
23 causing asbestos disease in individuals?

24 MR. LANKFORD: Let me object.

25 THE WITNESS: I don't believe that's equivocal.

1 But I understand there is disagreement among the
2 experts.

3 BY MR. RUCKDESCHEL:

4 Q If review of the historical files of Ford,
5 General Motors and Chrysler and their lawyers revealed
6 200 mesothelioma cases, automobile mechanics that had
7 worked for at least four years as automobile mechanics
8 and had no other known occupational exposures or other
9 exposures to asbestos, would that be a significant
10 scientific consideration for you?

11 MR. LANKFORD: Objection, incomplete, vague,
12 ambiguous, overbroad. To the extent you're trying to
13 pose a hypothetical it's incomplete.

14 THE WITNESS: If you could count on the
15 exposure histories to be accurate, it would be a
16 potentially useful exercise. The real question here is,
17 is that issue of exposure.

18 I've had cases where people swore they were
19 only exposed as brake mechanics. That's all they were
20 ever exposed to. And then a week before trial I find
21 out that they ground crocidolite, which I didn't even
22 know was done in the United States, and they did it for
23 a long time.

24 And so here, here's a real good example of why
25 the exposure history has to be exceedingly good and why

1 it's not inconsistent, my experience in litigation, with
2 Roggli's experience that something, these studies have
3 to be done carefully if they can be done at all.

4 Q Are you referring to the Hicks case in Texas?

5 A I am.

6 Q And in the Hicks case, the discovery process
7 in the litigation, the lawsuit that was involved,
8 revealed this other exposure of Mr. Hicks?

9 A Yes.

10 Q Would you agree that in this case, in the
11 Mallia case, no other such exposures have been
12 revealed?

13 MR. LANKFORD: Objection, calls for
14 speculation.

15 BY MR. RUCKDESCHEL:

16 Q To your knowledge?

17 MR. LANKFORD: Calls for speculation and he's
18 not being --

19 JUDGE KLINE: Well, if he has any knowledge.
20 Do you have any knowledge of that?

21 MR. LANKFORD: And just for the record, he's
22 not being offered on the issue of alternative exposures.

23 THE WITNESS: Do you want me to answer, Judge?

24 JUDGE KLINE: Yeah, go ahead and if you have
25 some knowledge.

1 THE WITNESS: I'm not aware of significant
2 alternative exposure.

3 BY MR. RUCKDESCHEL:

4 Q And the adversarial process of these lawsuits
5 is such that in the Hicks case this previously
6 undisclosed exposure was revealed prior to trial?

7 MR. LANKFORD: Objection, -- what is the
8 question if I could have it read back?

9 JUDGE KLINE: You want to repeat the question?

10 BY MR. RUCKDESCHEL:

11 Q Sure. I'll repeat it. In the Hicks case, the
12 adversarial process and the discovery process of the
13 litigation revealed this previously unknown crocidolite
14 exposure before trial, correct?

15 A Yes.

16 Q And in fact the information that you receive
17 in cases like this case, and I've read your report, and
18 it lists all the information that you've gotten, is
19 more comprehensive than the information that, for
20 example, Ms. Teta had in her study from the 1980s
21 regarding the subjects of that study?

22 A It's an apples-and-oranges comparison. I can't
23 answer your question that way.

24 MR. RUCKDESCHEL: Okay. Let's take our lunch
25 break.

THE VIDEOGRAPHER: Off the record. The time is

12:25.

(Lunch recess.)

1 (Lunch recess taken 12:25 p.m. to 1:06 p.m.)

2 THE VIDEOGRAPHER: Back on the record. The
3 time is 1:06.

4 (Plaintiffs' Exhibit 9 was marked for
5 identification by the court reporter.)

6 BY MR. RUCKDESCHEL:

7 Q Dr. Paustenbach, before we get into the
8 subject of money I'd like to show you what I've marked
9 as Exhibit 9 a copy of the written contract between
10 McLaren/Hart and Pacific Gas & Electric, specifically
11 ChemRisk, a division of McLaren/Hart, and Pacific Gas &
12 Electric. Is this the retainer related to the work
13 that ChemRisk did on chromium for PG&E?

14 A Yes, it looks like it.

15 Q And is that the work that led to what is known
16 as the Erin Brockovich case?

17 A Yes.

18 Q Is there any such contact to your knowledge
19 between Exponent and Ford, General Motors and Chrysler
20 or ChemRisk and Ford, General Motors and Chrysler?

21 A There is not one between ChemRisk and Ford,
22 General Motors or Chrysler. And I can't speak to
23 Exponent.

24 Q Is there any reason contract between any
25 entity and Ford, General Motors and Chrysler that

1 covers the work performed by ChemRisk?

2 A I hear that as the same question as you just
3 asked me.

4 Q What I'm asking is, there is no contract
5 between any entity and Ford, General Motors and
6 Chrysler, written contract, that covers your work?

7 A That's right.

8 Q Okay. I'd like to ask you some questions
9 about money. You own ChemRisk?

10 A Yes.

11 Q You're entitled to receive any profits from
12 ChemRisk?

13 A Yes.

14 Q What percentage of the work of ChemRisk is
15 related to litigation?

16 A It varies on the month and since we've been in
17 business.

18 Q In July of 2004 you gave a deposition in a
19 case pending in Baltimore taken by Mr. Dumler. You
20 were in Maine at the time. I believe it was taken by
21 phone.

22 In that deposition you testified that during
23 your time at Exponent before you came to ChemRisk the
24 percentage of your work that was related to litigation
25 went from approximately 50 percent when you started at

1 Exponent to a mere 75 percent when you left?

2 A Mm-hmm.

3 Q Is that a fair statement as to the percentage
4 of work related to litigation that you did at Exponent?

5 A Only for the time period I discussed.

6 Q Okay. And I'm talking about at Exponent.

7 A No, no, I'm talking about the time that you
8 just answered about, it was I think the last six months
9 at the time of the deposition that was an accurate
10 statement.

11 Q Okay. At the end of your time at Exponent it
12 was approximately 75 percent?

13 A If that's what I said that's correct.

14 Q Okay. And can you give me an historical
15 perspective with regard to ChemRisk's work, not just
16 your work at ChemRisk but ChemRisk the company's work
17 and litigation. In other words, when you began in 2003
18 what percentage was related to litigation, and if it's
19 changed can you tell me how it's changed?

20 A Well, I think I was asked some variation of
21 this question last week even. It started as the, I'm
22 going to say somewhere between 25 and 60 percent, and
23 it's probably remained in the 25 to 60 percent range
24 for the firm over the last two years of the firm.

25 Q And it varies month by month?

1 A Yeah, it could even be a little more than that
2 but it varies month by month.

3 Q Is it possible for you to approximate for me
4 over the entire time, the two years or so that ChemRisk
5 has been in operation, what the aggregate percentage
6 would be? I understand it varies month by month. Can
7 you tell me for the two years it's been about 50, it's
8 been about 60?

9 A Well, it really, as I said before, it depends
10 on what you call litigation. You know, sometimes you
11 get retained thinking, the client thinks they may
12 someday get sued. Sometimes they have been sued.
13 Sometimes they haven't been sued and they are concerned
14 about it. So it depends what you mean by that.

15 I assume you mean the client has actually been
16 sued and is looking to build its defense.

17 Q Let's start with that.

18 MR. LANKFORD: Your question is?

19 BY MR. RUCKDESCHEL:

20 Q My question is what percentage of the firm's
21 time is related to litigation as you've just defined
22 it?

23 MR. LANKFORD: Over what period, and any
24 litigation?

25 BY MR. RUCKDESCHEL:

1 Q That's correct.

2 A Over the last two years --

3 Q Yeah.

4 A -- which is as long as the company has been in
5 existence in its current form I would say somewhere
6 between 33 and 70 percent.

7 Q Is there a median, a mean that you can do, is
8 there an average starting that time period that you
9 can --

10 A I can't think of any good reason to be any more
11 precise than that.

12 Q Well, I don't know whether I can accept that
13 as an answer. And is it possible, whether you want to
14 do it or not, or whether you can think of a good reason
15 to do it or not, is it possible for you to give me that
16 approximation?

17 MR. LANKFORD: What approximation?

18 MR. RUCKDESCHEL: He's just given me a range.

19 MR. LANKFORD: Right.

20 MR. RUCKDESCHEL: I've asked him -- the range
21 is I believe on a month-to-month basis, it's between a
22 third and 70 percent.

23 MR. LANKFORD: Mm-hmm.

24 BY MR. RUCKDESCHEL:

25 Q Is that fair?

1 A On a month-to-month basis I think it's between
2 a third and 70 percent.

3 Q And what I'm asking is, we'll start with can
4 you, can you approximate in the aggregate what the
5 percentage is?

6 A I'd say in the last two years a good estimate
7 would be about half.

8 Q Okay. And that's related to litigation where
9 a company comes to you and says we are in or about to
10 be in litigation and we want you to help us prepare our
11 defense.

12 A Yes.

13 Q Now if we were to define litigation more
14 broadly so that it was involving work such as writing
15 the papers that you wrote for General Motors and Ford,
16 does that number go up or were you including that type
17 of work in the earlier definition?

18 MR. LANKFORD: Well, objection,
19 mischaracterizes his testimony with respect to the
20 nature of his work in doing these papers.

21 JUDGE KLINE: Why don't we leave the question
22 as does that number go up, forget the last half of it.

23 THE WITNESS: Writing would probably not take
24 it up. Research might increase it.

25 BY MR. RUCKDESCHEL:

1 Q Okay. If we add in what I'll call
2 litigation-related research how far up does the number
3 go?

4 A For the sake of discussion I'll say 60 to
5 65 percent.

6 Q Okay.

7 A And that would include other litigation-related
8 issues probably.

9 Q What are the other types of litigation-related
10 issues that you've just referred to?

11 A If somebody said to me they wanted to
12 understand their product because they wanted to have a
13 defense in the event of unwarranted litigation, then I
14 would, I would put that in this category.

15 Q How would you help them understand the
16 product?

17 A Let's say someone wanted to know how much
18 aluminum was generated when it went through an aluminum
19 shredder because they were fearful that some company,
20 or no, some plaintiff's lawyer said I think the people
21 who crush these cans are overexposed to aluminum dust.
22 Okay, and if that was to occur they might say we're so
23 concerned about that. Would you do a simulation study
24 and tell us what the actual dose is of people who crush
25 these cans. And so if I did that I would put that in

1 that kind of category. That's the kind of thing that
2 we might be asked to do if the people who make this can
3 were concerned about getting sued some day about that.

4 Q Okay. I'd like to look at the other 35 to
5 40 percent of ChemRisk's business over the last two
6 years.

7 A Mm-hmm.

8 Q What types of activities make up that 35 to
9 40 percent?

10 A You're probably not entitled to it but I'll go
11 ahead and help you along anyway. Some of it is, a
12 large fraction of that would be related to our work for
13 the government in doing dose reconstruction work at the
14 nuclear arsenals.

15 Q What is a dose reconstruction?

16 A That's where you may or may not have much
17 exposure information on a person over their lifetime,
18 but someone wants to know approximately what they were
19 exposed to. So by combining modeling data plus their
20 historical data, plus what you gather from the
21 literature and your professional experiences, you go
22 back and do your best at reconstructing their lifetime
23 of exposure in quantitating their risk.

24 And in this case, the federal government has
25 funded studies to examine the likely exposure of people

1 who live around the seven or eight different nuclear
2 arsenals as they are called that, were built during
3 the, right after World War II to make or handle nuclear
4 products and weapons. So we try to do the work,
5 estimate exposure of those in the community to either
6 radionuclides or chemicals.

7 Q Can a dose reconstruction be done with regard
8 to asbestos exposure?

9 A Usually.

10 Q Have you done so in the Mallia case?

11 A I didn't do one in the Mallia case.

12 Q Is there information that you are missing that
13 you would need in order to do so?

14 A Well, it depends on what level of precision you
15 wanted to estimate exposure. I feel like I could get
16 reasonably close if everything I had was known to be
17 accurate.

18 Q If you were to assume that Mr. Mallia's
19 testimony was accurate within the parameters of it, you
20 would be able to do so?

21 A I think I could get very close.

22 Q In that type of situation would you rely upon
23 the known information regarding Mr. Mallia or would you
24 do a Monte Carlo-type analysis?

25 A Depends how you wanted to see the information

1 presented. You could do it as a point estimate or you
2 could do it as a Monte Carlo. The Monte Carlo would
3 give you a range and perhaps a probability that certain
4 values would not be exceeded.

5 Q When you have historical information regarding
6 the individual, is it appropriate to use a Monte Carlo
7 analysis?

8 A I don't think there is many benefits to it if
9 you have a very good description. It's only, it's
10 really better when you're talking about populations.

11 Q And that's something you discussed with
12 Mr. Praglin last month in the Aguayo case?

13 A Yeah. Your memory is very good, Counsel. For
14 all the depositions and testimony you've read and not
15 using notes your memory is outstanding.

16 Q I don't sleep much.

17 A That's apparent.

18 Q Do you have the level of information in this
19 case, the Mallia case, such that it would be in your
20 professional judgment inappropriate to do a Monte
21 Carlo-type analysis with regard to any dose
22 reconstruction that was performed?

23 A I wouldn't want to generalize and say
24 inappropriate. Sometimes it's worth the effort,
25 sometimes it's not. When you have a very thorough case

1 history, as I told Mr. Praglin, it's not that helpful.

2 You can do it.

3 Q Sure.

4 A It can provide information. It's a totally
5 different situation Mr. Praglin faced. He's got a
6 whole other series of reasons why Monte Carlo is not
7 helpful for him.

8 Q I'm sure. I don't want to talk to you about
9 that. Now with regard to Monte Carlo analysis, it
10 provides a range of probabilities? Can you explain it
11 to me in layman's terms?

12 A What you do is you take the, each of the
13 factors in calculating dose or in estimating dose, and
14 for each one which you have some level of variability,
15 let's say you believe, for instance, that brake
16 mechanics' time-weighted average exposures for a
17 certain decade might be between .01 and .06 let's say,
18 then you can put a weighting on each of those, either
19 through data or through professional judgment. And you
20 can derive distributions for each of the exposure
21 factors, and then using the Monte Carlo technique
22 combine them and come up with one single distribution
23 for the value that you're trying to estimate.

24 You could do it and it would be informative.
25 As I told Mr. Praglin, when you have, especially in his

1 case, quite a bit of exposure data, then the results
2 aren't going to be much different either through a
3 point estimate than through Monte Carlo. When you're
4 talking about populations of people then it's a lot
5 more informative.

6 Q And that's because within a given population
7 there is variation in, for example, dose?

8 A There is often population questions as well.
9 People want to know is this town or is this group of
10 people likely to have anyone that is over exposed or
11 exposed at a level that is likely to be serious.

12 Again, you can do Monte Carlo on an individual.
13 I don't have any problem with it. But it's very
14 helpful when you're talking about populations.

15 Q And if we look at individuals, though, if we
16 look at a group of let's say a hundred brake mechanics
17 from the 1960s.

18 A Right.

19 Q The individual exposures of those mechanics
20 will fall within a range?

21 A Right.

22 Q But the individual exposures will be different
23 for each individual?

24 A By definition.

25 Q Right. And some will fall at the high end of

1 that range, some will fall at the low end of that
2 range, but we would expect that the majority will fall
3 somewhere in the middle?

4 A Sure.

5 Q And the amount of asbestos dust that a brake
6 mechanic in, for example, the 1960s would be exposed to
7 would be dependent on the types of work practices they
8 used in the workplace?

9 A Sure.

10 Q And that would include the procedures that
11 they performed on brakes, the number of procedures they
12 performed, and any control methods that they used with
13 regard to the release of dust?

14 A True.

15 Q So to look at any individual and to determine
16 that individual's dose, we would want to know whether
17 they opened the box or whether somebody in the part's
18 department, for example, opened the box and brought the
19 brake shoes to them?

20 A If you wanted that level of precision you'd
21 have to go through each of those steps.

22 Q And we walked through each of the steps of
23 potential exposures that you and I discussed earlier?

24 A That's right.

25 Q And for each --

1 A And you'd have to weight it by year and correct
2 it for the amount of asbestos in the brake and whether
3 or not the brake had now become bonded rather than
4 riveted and whether it was prebeveled or not
5 prebeveled, and then you would couple that with the
6 individual's testimony about their personal work
7 practices, and at the end you'd have some estimate.

8 Q If we look at each of those activity, for
9 example, some mechanics beveled edges all the time,
10 some mechanics beveled edges some of the time, and some
11 mechanics never beveled edges?

12 A That's probably not true but you can make that
13 assumption if you want. I have no reason to believe
14 that people always beveled or people always sanded and
15 it's especially true depending on the time in history.
16 Beveled brakes, it just wasn't that common in the more
17 recent era.

18 For example, and sanding is really almost
19 unheard of except with an existing brake.

20 Q To remove the glaze?

21 A That's right.

22 Q Have you in your work for General Motors, Ford
23 and Chrysler come across other mechanics who described
24 roughing up the surface of a new brake with sandpaper
25 or emery cloth like Mr. Mallia described?

1 A After he's taken it out of the box?

2 Q Yes.

3 A I have not.

4 Q Okay.

5 A Not experienced mechanics. I've seen it
6 reported by plaintiffs but talking to mechanics in the
7 real word none have said that to me.

8 Q Of the cases you've seen against General
9 Motors, Ford and Chrysler have individuals in those
10 cases reported what Mr. Mallia reports, with regard to
11 roughing up the surface of brakes with emery cloth or
12 sandpaper, new brakes?

13 A It's highly unusual.

14 Q You've seen it, though?

15 A I think I've seen it on a couple occasions but
16 it's highly unusual.

17 Q And that may be because it didn't happen, or
18 it may be because those mechanics fall within the range
19 of individuals who perform that job?

20 A Yeah. I thought that's where you're going. I
21 don't think so. I don't think that's what's happening.
22 You know, people normally don't do extra work if it's
23 not needed. And it's plausible Mr. Mallia was told
24 that this was a useful practice and he learned from one
25 person who happened to believe in it.

1 Like I said, it's never called for, it's never
2 discussed in any manual. And the mechanics I've talked
3 to say the only time they've ever done it is when there
4 was glaze on the brake. It would not be something you
5 do right away.

6 Q Do you believe Mr. Mallia was being
7 untruthful?

8 A No, I always believe the witness is telling the
9 truth.

10 Q Okay. We digressed a little bit. Let's talk
11 about money. You started working in the asbestos
12 litigation in approximately mid 2001; is that correct?

13 A You know, you've asked me this before. I've
14 tried to be helpful and move this along. If you want
15 me to be specific I'd have to back and look at my
16 records. But if you me to say, if you want to
17 stipulate, yeah, I've testified to this before and it
18 was around 2001 I'll accept that.

19 Q You have said before it was around July of
20 2001 and I'm trying to give us a marker.

21 A And that sounds about right.

22 Q All right.

23 A But again if you want to be specific I'd have
24 to go back and look.

25 Q I'm not looking for, that's not the basis of

1 this. I'm trying to give us a start point.

2 A Okay.

3 Q Since that time can you tell me how much the
4 billings for your work and the work of your
5 subordinates has been to General Motors and Ford?

6 A No.

7 Q Can you approximate it?

8 A Not since that time because I worked at
9 Exponent. There would be whole other groups that I
10 wouldn't even have a clue as to what they billed.

11 Q You've done this before and because you
12 haven't done with it me I would like to do it now. I
13 would like to walk through sort of different aspects of
14 the work that you've done where you've given
15 approximations of how much the billings were.

16 The first start is the first six months or so
17 where you were getting up to speed on the asbestos and
18 brake issues, scientific issues. And I believe you
19 estimated in the past that that range between 2 and
20 \$500,000.

21 A Is your question, we have to be clear here, is
22 it the group or is it me personally that is billing?

23 Q That is on an interesting question. What I'm
24 asking about here is the billings for Exponent.

25 A I doubt that I testified to that.

1 Q Okay.

2 A If you have it I'd like to look at it.

3 Q No, I'm asking whether that's accurate.

4 A The way I heard the question is I had testified
5 to this before with respect to the first six months of
6 Exponent's billing. And I'm telling you I'm pretty
7 sure I would not have done that.

8 Q Okay. What about for your billings? If the 2
9 to \$500,000 range you gave Jonathan Smith George a fair
10 approximation of the amount of billings for your
11 getting up to speed on the issues?

12 MR. LANKFORD: If you're going to start asking
13 him about whether testimony he's given in prior cases is
14 accurate without giving him the question, etc., then,
15 you know, I'm going to object to that line of
16 questioning without reviewing the transcript.

17 MR. RUCKDESCHEL: Okay. Let's do it ad omissio
18 then since you prefer it that way.

19 BY MR. RUCKDESCHEL:

20 Q Tell me how much the billings were to Ford,
21 General Motors and Chrysler for the six-month period
22 where you were educating yourself regarding asbestos
23 and brakes.

24 MR. LANKFORD: Objection, vague, overbroad.

25 JUDGE KLINE: Go ahead and respond.

1 THE WITNESS: Yeah, I'd like to hear it again,
2 Judge.

3 (Record read.)

4 THE WITNESS: That's what I thought. Judge,
5 you see the problem with the question, Your Honor?

6 JUDGE KLINE: Say that again?

7 THE WITNESS: The problem with the question is
8 I can't tell if it's about me or the company Exponent.

9 JUDGE KLINE: Okay, break it down.

10 BY MR. RUCKDESCHEL:

11 Q Let's just do a total for Exponent.

12 A I wouldn't know.

13 Q Okay, now let's do for you.

14 A In the first six months of which I was, after I
15 was retained I would expect the billings to be in the
16 vicinity of 100,000, \$200,000.

17 Q Okay. And that was the six-month period where
18 you were educating yourself regarding asbestos and
19 brakes?

20 A Well, that education continues to this today
21 day. But let's just say during that first six months
22 that's probably what my billings were. There was
23 probably more involved than just educating myself. You
24 know, there is also giving advice as to how it fits
25 into the occupational health arena. I mean I wouldn't

1 want to you characterize it as I went in the library,
2 came out six months later, billed them for half my time
3 and they sent me a check which I put in my pocket.
4 That's not what happened.

5 MR. RUCKDESCHEL: Okay, yeah.

6 MR. LANKFORD: And I'm going to object if the
7 court will allow or the judge will allow a standing
8 objection to this whole line of questioning as calling
9 for speculation. The responses being "probably" and
10 other qualifiers like that, I think it's clear it's
11 calling for speculation. But go ahead.

12 JUDGE KLINE: If he knows the answer, he can
13 tell him that he doesn't know or --

14 MR. LANKFORD: Well, let me admonish the
15 witness that what you have to provide is information
16 that you shouldn't guess or speculate, but if you know
17 the answer then provide it. And my concern is when you
18 say "probably," and "I would think," my concern is that
19 you may be guessing or speculating. If you're not,
20 fine, provide the response. If you are, then please
21 respond as the court stated. If you don't know the
22 answer, you don't know.

23 MR. RUCKDESCHEL: Your Honor, I would ask you
24 admonish counsel to cease the incessant speaking
25 objections.

1 JUDGE KLINE: Okay. Folks, as far as I'm
2 concerned this witness is going to respond truthfully to
3 all of the questions, ask him the question and he will
4 respond if he knows or he's guessing or whatever he's
5 doing. If he knows the answer then he's required to
6 give it.

7 BY MR. RUCKDESCHEL:

8 Q Understanding that your education continues to
9 this day, we have referred earlier in this deposition
10 to the six months or so where you did your initial
11 education in asbestos and brakes, and I'm asking you
12 what your estimation is for billings during that time
13 period, and your answer is between 100 and 200,000?

14 A That's correct.

15 Q Okay.

16 A That's my best estimate.

17 MR. LANKFORD: And let me object, it's
18 misstating the testimony.

19 MR. RUCKDESCHEL: Counsel, that's clearly not
20 what is happening here. Because the witness just said
21 that that was correct. When you say it's misstating the
22 testimony, that's just a ridiculous statement to make when
23 the witness has said it was an accurate statement.

24 JUDGE KLINE: It was estimate.

25 MR. LANKFORD: You can read it back but the

1 first response said "probably." So you're dropping off
2 those qualifiers.

3 MR. RUCKDESCHEL: Are you suggesting
4 Dr. Paustenbach was wrong when he answered the question,
5 Counsel?

6 MR. LANKFORD: No, but clearly by the nature of
7 his response, you're asking about four years ago and the
8 nature of his response it was clear he was trying to
9 provide you an answer, some type of estimate and said
10 "probably," etc., and now you're dropping off the
11 "probablies" and things to that effect, so...

12 JUDGE KLINE: Thank you, very much.
13 Mr. Witness, you are required to truthfully answer every
14 the question that you know the answer to. You are not
15 required to answer questions you don't know the answer
16 to.

17 BY MR. RUCKDESCHEL:

18 Q During the next six-month period we talked
19 about earlier today, Dr. Paustenbach, when you were
20 preparing yourself for potential testimony in these
21 cases, can you provide for me an estimation of the
22 billings during that six-month period for your work?

23 A I can't. Cannot.

24 Q And can you provide for me, sir, an estimation
25 of the amount of time -- I'm sorry, the amount of money

1 that was billed for the research, writing and
2 publication of the 2003 paper?

3 A No.

4 Q Have you provided such estimates in the past?

5 A I gave estimates in the past about the total
6 amount of time I invested in those papers and that I
7 thought were spent on them.

8 Q Okay. Will you please provide me with that
9 estimate then, the total amount of time for the papers?

10 A As I testified before, I was having to -- it
11 was my best estimate, not based on having been
12 associated with the billings, okay?

13 Q Okay.

14 A So it's plausible if you were to discover the
15 billings would you have some different value because
16 you would have the actual answer.

17 Q Okay.

18 A And I think what I testified to in the past is
19 somewhere between 80 to 120,000 for the first paper,
20 and upwards of 250,000 for the second paper.

21 Q All right. And for the five months or so in
22 2003 when ChemRisk was in business, can you tell me,
23 sir, what the total billings to Ford, General Motors
24 and Chrysler were approximately during that time
25 period?

1 THE WITNESS: Your Honor, I assume he's
2 entitled to that information?

3 JUDGE KLINE: What's that?

4 THE WITNESS: What I'm billing these clients
5 for things outside this case?

6 JUDGE KLINE: What are we talking about? The
7 things --

8 THE WITNESS: He wants to know about my company
9 and what I bill clients that have nothing to do with
10 this case.

11 MR. RUCKDESCHEL: I confined the question to
12 Ford, General Motors and in 2003. Dr. Paustenbach has
13 provided estimates --

14 THE WITNESS: Wait. But I was right, Counsel
15 about what I said. I just described properly to the
16 judge what your question was.

17 MR. RUCKDESCHEL: I'm providing His Honor with
18 context, Mr. Witness.

19 And Judge, Mr. Paustenbach has provided these
20 estimates as recently as last week, not in my record,
21 not in my deposition, and I'm entitled to that
22 information. It's in the public domain.

23 JUDGE KLINE: If it's in the public domain you
24 don't even have to ask it.

25 THE WITNESS: And, Your Honor --

1 MR. RUCKDESCHEL: I don't have it on videotape,
2 Your Honor.

3 MR. LANKFORD: He was produced, the defendants
4 have produced in this case various billing records as
5 well to plaintiffs' counsel.

6 MR. RUCKDESCHEL: That is a grossly incomplete
7 statement, Your Honor. The General Motors bills that
8 were produced in this case are redacted almost
9 completely. And so counsel suggesting that somehow the
10 complete billing records have been produced by General
11 Motors in this case is an absolute misrepresentation.

12 MR. BELL: Those records show what the
13 companies paid for his work. So if you add it up you
14 have a fair representation.

15 MR. RUCKDESCHEL: They show only for
16 Dr. Paustenbach's work and not for the work of the
17 employees of his of which he's the hundred percent
18 owner.

19 MR. BELL: Of which the court only ordered
20 yesterday so we haven't had time to compile that. Take
21 a look at the order.

22 JUDGE KLINE: There's an order requires
23 requiring him to --

24 THE WITNESS: Mr. Ruckdeschel?

25 MR. RUCKDESCHEL: Yes.

1 THE WITNESS: We can move this right along.
2 There's no question that I testified to that answer last
3 week. But I was really kind of supporting what the
4 judge was saying. Why I are trying to impeach me on
5 something I just testified to last week? You already
6 have the transcript.

7 JUDGE KLINE: Please, we'll move this along if
8 you will answer the question and let your lawyers
9 participate in any argument. Move on to your next
10 question.

11 BY MR. RUCKDESCHEL:

12 Q Okay. Dr. Paustenbach, with regard to
13 billings of ChemRisk in 2003 to General Motors, Ford
14 and Chrysler during the five months of 2003, last week
15 you testified that you believe the billings totalled
16 between 200 and 400,000. Is that a fair approximation?

17 MR. LANKFORD: Can you provide him with the
18 transcript you have in front of you that you are
19 purportedly reading from?

20 MR. RUCKDESCHEL: I'm not purportedly reading
21 from it. I'm asking if that's a fair approximation.

22 JUDGE KLINE: If he remembers. Otherwise show
23 him what he says.

24 BY MR. RUCKDESCHEL:

25 Q Dr. Paustenbach, do you remember what you said

1 last week?

2 A Yes.

3 Q Okay. Did you say it was between 200 and
4 400,000?

5 A Yes.

6 Q And did you say for 2004 it was between 1 and
7 2 million?

8 A Yes.

9 Q And for 2005 between 700 and 1.5 million,
10 700,000 and 1.5 million?

11 A I don't think so.

12 Q Okay. Let's see what you said because I want
13 it to be accurate.

14 A Let's take a break and get it.

15 Q I've got it right here.

16 A While you're looking why don't I take a look as
17 well.

18 Q Great. I have it, Doctor. And your answer
19 was:

20 "I would say 700,000 to 1.5 million,
21 and of that virtually none has been paid
22 to the best of my knowledge."
23 It's the blue circle there.

24 A Okay.

25 Q Is that a fair estimate of the billings this

1 year?

2 MR. LANKFORD: Can I read it before he
3 responds? Okay.

4 BY MR. RUCKDESCHEL:

5 Q Is that a fair estimate, Doctor, of the
6 billings for this year?

7 A That was my estimate, yes.

8 Q Okay. Is that your estimate today? I know
9 that was your estimate last week. Would you like to
10 change your estimate today?

11 A No.

12 Q Okay. Now you've also performed work for
13 Amchem in the asbestos litigation, correct?

14 A Yes.

15 Q And you worked on a project that involved
16 mastics?

17 A Yes.

18 Q And for the mastics project Amchem played
19 ChemRisk over a million dollars; is that correct?

20 A No, that's incorrect.

21 Q Okay. How much did Amchem pay ChemRisk for
22 the mastics project?

23 A Zero, because ChemRisk wasn't in business at
24 that point.

25 Q Did Amchem place Exponent?

1 A Yes.

2 Q Okay. And was that over a million?

3 A I think I testified it has been.

4 Q Okay. And was it?

5 A Sure. There was a lot more work than

6 litigation involved but the total bill to Exponent for

7 work related to Amchem was over a million dollars.

8 Q How much an over a million?

9 A I'm not sure because there were quite few

10 witnesses involved. There was the polymer science

11 piece of the case and then there was the health risk

12 assessment piece to the case.

13 Q Do you know if it was over 2 million?

14 A No, I don't.

15 Q You've also performed work in the asbestos

16 litigation for Union Carbide?

17 A Yes.

18 Q And that involved Bakelite?

19 A Yes.

20 Q Can you estimate for me the total billing --

21 was that Exponent or ChemRisk?

22 A That was Exponent.

23 Q Can you estimate for me the total billings for

24 the Bakelite project?

25 A I can't, no.

1 Q Okay, how about for your work?

2 A That one, I don't know what I've said
3 previously. I would stand behind whatever I said
4 previously, but would I say it was probably in the
5 \$250,000 or so range. It could be plus or minus a
6 hundred thousand.

7 But the reason it's very hard to answer that
8 question, of course, is you have research and then
9 there is litigation prep and then there is litigation.
10 And I understand you're just looking for a big number.
11 But I don't really know how to answer the question any
12 better than I have.

13 Q And McLaren/Hart ChemRisk in the New Jersey
14 chromium clients the billings totaled between 7 and
15 \$10 million?

16 A Over the course of a decade I think that's
17 about right.

18 Q Okay. And for PG&E in the Anderson case, the
19 Erin Brockovich case, the billings were a million and a
20 half or so?

21 A At least, yes.

22 Q Do you have an idea of how much more than a
23 million and a half it would have been?

24 A No, but I think I said before that's about
25 where it was and I published that in my last paper.

1 Q Do you have any approximation,
2 Dr. Paustenbach, of the total amount of money that you
3 billed for your time in litigation-related services in
4 the last 20 years as you've been doing this type of
5 work?

6 A Well, as you know, since you've read so many of
7 my depositions, I didn't do much deposition and
8 courtroom work until the last four or five years. I
9 tried to stay away from it, in fact. So I'm not really
10 able to answer your question.

11 Q Okay. What was your position at Exponent?

12 A I was a Vice President.

13 Q And were you a principal of Exponent?

14 A Yes, sir.

15 Q What did that mean?

16 A Principal means you are responsible for
17 overseeing projects, for being a principal client
18 interface, and for giving advice I guess to the
19 management of the company.

20 Q Was there a division you worked in at
21 Exponent?

22 A Yes.

23 Q Were you the head of that division?

24 A Yes.

25 Q How many individuals worked under you?

1 A It was between 100 and a 150 depending on the
2 different time during my time with them.

3 Q And were you directly or indirectly the
4 supervisor of those individuals?

5 A Well, you are indirectly for all of them but
6 directly for your direct reports which I think were
7 between six and ten.

8 Q You were the general of that division?

9 A I was.

10 Q And your compensation at Exponent involved a
11 salary?

12 A Correct.

13 Q A discretionary bonus?

14 A Correct.

15 Q Was there any other compensation that you
16 received while at Exponent?

17 A You can receive stock options. It was a
18 publicly-traded company.

19 Q And you received stock options?

20 A I did.

21 Q Can you estimate for me the value of the stock
22 options that you received, Dr. Paustenbach?

23 MR. LANKFORD: Let me object on privacy
24 grounds.

25 THE WITNESS: To the best of my knowledge I

1 haven't had to talk about that previously.

2 BY MR. RUCKDESCHEL:

3 Q When you were at Exponent it was a
4 publicly-traded company?

5 A Yes, sir.

6 Q Individuals like yourself who own substantial
7 amounts of stock in publicly-traded companies are
8 required to file reports with the SEC when they have
9 transactions related to those stocks?

10 A That's correct.

11 Q Okay. And you filed such reports?

12 A I did.

13 Q Are they in the public domain?

14 A Yes, they are.

15 Q Would you estimate for me, sir, the value of
16 the stock options you received while at Exponent?

17 MR. LANKFORD: At what point in time?

18 MR. RUCKDESCHEL: During the four years he was
19 at Exponent.

20 MR. LANKFORD: No, what point do you want to
21 value them, when they were received?

22 BY MR. RUCKDESCHEL:

23 Q When they were exercised.

24 A Well, you're not entitled to. You're welcome
25 to look up whatever you like in the public domain but I

1 know you're not entitled to that information.

2 Q Is it fair to say that you made over a half
3 million dollars exercising options granted to you as
4 compensation at Exponent and selling them?

5 MR. LANKFORD: Objection, privacy.

6 MR. BELL: Vague.

7 BY MR. RUCKDESCHEL:

8 Q Is that information in the public domain,
9 Doctor?

10 THE WITNESS: I don't recall if it is.

11 BY MR. RUCKDESCHEL:

12 Q Okay. Has the way that you've done business
13 since can starting with ChemRisk McLaren/Hart,
14 continuing to Exponent and now with ChemRisk as it
15 exists today, has the general business model been the
16 same?

17 MR. LANKFORD: Objection, vague.

18 JUDGE KLINE: If he can answer it, go ahead and
19 answer it.

20 THE WITNESS: I would say in large measure it
21 has.

22 BY MR. RUCKDESCHEL:

23 Q And does the work that you performed for, that
24 you have performed for General Motors, Ford and
25 Chrysler follow that business model?

1 MR. LANKFORD: Objection, same objection.

2 JUDGE KLINE: In response, go ahead.

3 THE WITNESS: The term "business model" is a
4 little vague to me. So I better tell you what I meant
5 when I answered the last question.

6 By business model I would say that the model
7 that I developed and hopefully supported over the years
8 was one of trying to bring as much science to
9 environmental problem solving as one can bring.

10 And rather than rely exclusively on the
11 literature I've wanted to contribute to the literature,
12 and rather than just write reports that get put away in
13 a file cabinet I like putting them in the public domain
14 so that everyone can draw with them.

15 As you know of my discussions with Praglin, I'm
16 proud that history. So from that standpoint, from a
17 business model standpoint, to the extent that the
18 business model hiring as bright a people as I can get
19 and then get them to do applied research, that's the
20 business model. I believe in organic growth and that's
21 probably my trademark.

22 Q Okay. That's not what I meant by business
23 model.

24 A I guess we talked by each other then.

25 Q It's good you clarified. You were hired by

1 General Motors and Ford and Chrysler to work with them
2 in connection with asbestos claims arising from
3 exposure to brake and clutch products?

4 A Well, I'm struggling with it being a
5 nonsequitur. Do you want to flush out the last
6 question and start over?

7 Q Sure.

8 A Okay.

9 Q I'm starting over so we're on the same page.

10 A Okay.

11 Q I want to talk about what I perceive the
12 business model to be.

13 A Okay.

14 Q You got hired by General Motors and Ford and
15 Chrysler?

16 A Yes.

17 Q And you educated yourself on asbestos?

18 A Yes.

19 Q You hadn't done so before in your professional
20 career?

21 A Not on brake dust, that's right.

22 Q And not on asbestos?

23 A That's fair.

24 Q All right. So you educated yourself and then
25 you wrote some papers?

1 A Correct.

2 Q And during that time and subsequently you've
3 provided expert witness testimony to General Motors and
4 Ford.

5 A That' true.

6 Q And Chrysler?

7 A That's true.

8 Q And during that time with respect to your
9 testimony you provided outlines of questions to lawyers
10 for General Motors, Ford and Chrysler about ways that
11 they can ask you questions at trial that will elicit
12 your testimony effectively?

13 A That's some variation of what I testified to
14 last week. I wouldn't have said it quite that way.
15 But let's just say I have given them help as to how to
16 get the science issues out on the table.

17 Q You've educated them some?

18 A Sure.

19 Q And you've done that with other toxic
20 substances as well?

21 A I've followed a model of trying to learn about
22 the substance, share what I've learned in the published
23 literature, and if they ask, testify about it. From
24 that standpoint if that's a business model then that's
25 what I've done.

1 Q You've been contacted by companies or lawyers
2 for companies who have either regulatory or litigation
3 difficulties?

4 A Quite often.

5 Q And oftentimes you in your professional career
6 haven't worked with those substances before?

7 A Sure.

8 Q And you've educated yourself, like you did in
9 these case, with regard to those substances?

10 A Yes.

11 Q You've published with regard to those
12 substances?

13 A Yes.

14 Q You provided the lawyers with assistance on
15 how to ask you questions effectively at trial?

16 A That's again a little bit of a difference spin
17 than what I just said but --

18 Q Is it accurate?

19 A What is accurate is what I said before. I
20 certainly try to teach the lawyers, you know, what the
21 issues are in the case that they ask me about them.

22 Q And you've then provided expert testimony
23 regarding those subjects?

24 A That's true.

25 Q And in providing that testimony you relied

1 upon the things you've published in those topics?

2 A And what other people have published.

3 Q I understand. Can you tell me the substances
4 where you followed that progression of business
5 activity? There's asbestos.

6 A Well, I find the business activity issue to be
7 a bit of a pejorative.

8 Q I'm not meaning it that way. You're in the
9 service business; is that correct?

10 A That's true.

11 Q Okay. You have a company, it's a business,
12 right?

13 A It's a business.

14 Q I'm not using pejoratively. And the business
15 does business?

16 A The business does business.

17 Q And that business --

18 A That business is solving problems and to the
19 extent that we have to go to trial to talk about how we
20 solve the problem, then we do it.

21 Q Okay. Now I want to know what other
22 substances you followed that same sort of progression
23 with as you did with asbestos. There is asbestos I
24 believe Dioxin as well?

25 A Sure.

1 Q Benzene?

2 A Benzene, hexavalent chromium.

3 Q Chromium 6, all right.

4 A Beryllium.

5 Q Formaldehyde?

6 A Perhaps.

7 Q What do you mean, perhaps?

8 A Your scenario involved testimony and I don't
9 think I've ever been asked to testify in trial about
10 formaldehyde.

11 Q Okay. Any other substances where you've gone
12 through this progression of educating yourself about
13 the substance, publishing, and then being available to
14 testify?

15 A I think glycol ethers would fit in that
16 category. Glycol ethers, G-L-Y-C-O-L, new word,
17 E-T-H-E-R-S.

18 Q Any others?

19 A I'd have to look at my CV. There may be a
20 couple others.

21 MR. RUCKDESCHEL: I may be able to help you.
22 Let me mark as Exhibit 10, I've marked as Exhibit 10 a
23 document with 37 potentially toxic substances that I
24 believe you perform professional work on in your career.

25 (Plaintiffs' Exhibit 10 was marked for

1 identification by the court reporter.)

2 BY MR. RUCKDESCHEL:

3 Q And what I'd ask you to do, Dr. Paustenbach,
4 is to make sure that this list is accurate, that you
5 have in fact worked, provided professional services
6 regarding these substances in your career, and then
7 we'll move on from there.

8 A By and large these are chemicals that I've
9 studied during my career. They don't all follow the
10 path that we discussed. I've done no substantial work
11 on DES. I've done a little bit of work on DES.

12 And just a little on nitroglycerin.

13 MR. LANKFORD: Counsel, can you --

14 BY MR. RUCKDESCHEL:

15 Q Do you need a break, Doctor?

16 A The phosphorous was from a phosphorous industry
17 where the radionuclides were found. And except for
18 spellings I would say these are all chemicals that I
19 know something about.

20 MR. LANKFORD: If we could take maybe a
21 10-minute brake at 2:00 o'clock for a few minutes?

22 MR. RUCKDESCHEL: Absolutely. Can you give me
23 one more minute on this with the doctor, and I think
24 we'll be done with it.

25 MR. LANKFORD: Sure.

1 BY MR. RUCKDESCHEL:

2 Q Doctor, I checked off on this asbestos,
3 benzene, beryllium, dioxin, formaldehyde and glycol
4 ethers for things that sort of fall into the pattern
5 that we were discussing a minute ago. Are there other
6 substances that fall into that pattern? And if so you
7 can just give me the number and I'll click them off.

8 A It's possible silica may one day fit. I would
9 say that's all.

10 MR. RUCKDESCHEL: Okay. Let's take that break
11 now for counsel. And people on the phone, we need ten
12 minutes.

13 THE VIDEOGRAPHER: This concludes Tape 2.
14 Going off the record at 2:00.

15 (Discussion off the record.)

16 JUDGE KLINE: We're on the record. I had said
17 that I had a chance to think about it during this
18 deposition. The question is as I understand it was
19 whether or not the witness knew of any study that showed
20 the asbestos release when a brake pad box was opened.

21 And the witness said that there had been a
22 preliminary study, actually done in his office by
23 someone employed in his office, that it had not been
24 determined if the study had a scientific basis, or
25 whether the study had any validity, and therefore the

1 witness said he would not rely upon it.

2 So it was my impression that the work product
3 privilege and all of that stuff, the witness said he
4 would not rely upon it, he didn't consider it to be a
5 valid study at this point, then I would see no reason to
6 question him about it.

7 MR. LANKFORD: Thank you, Your Honor.

8 JUDGE KLINE: Fellows, it's been a pleasure.
9 I'm getting off and if you need me you can reach me at
10 one of these phones. You got the numbers, right?

11 MR. RUCKDESCHEL: Yes.

12 (Brief recess.)

13 THE VIDEOGRAPHER: Back on the record. Here
14 begins Tape 3. The time is 2:21.

15 (Plaintiffs' Exhibit 11 was marked for
16 identification by the court reporter.)

17 BY MR. RUCKDESCHEL:

18 Q Dr. Paustenbach, I just handed across to
19 counsel for Ford and General Motors what I've marked as
20 Exhibit 11. Would you identify that document for the
21 record, please, sir?

22 A It's a list of depositions or trial testimony
23 that I gave between August 18th, 2003 and 1990.

24 Q To the best of your knowledge is that
25 document, was that document complete and accurate at

1 the time that it was prepared?

2 A To the best of my knowledge.

3 Q Thank you. I don't have any questions for you
4 about it.

5 (Plaintiffs' Exhibit 12 was marked for?
6 identification by the court reporter.)

7 BY MR. RUCKDESCHEL:

8 Q Doctor, I'm marking as Exhibit 12 a document
9 dated June 30th, 2005 a document we were provided after
10 the lunch break. Can you tell me what that document
11 is?

12 A It's what I call my case notes for this case.

13 Q Can you explain to me what the document
14 consisting of?

15 A It's a summary of what's contained in documents
16 given to me generally. It's summaries of depositions.

17 Q Did you prepare the document or did one of
18 your employees or some combination?

19 A Some combination.

20 MR. RUCKDESCHEL: Okay. Doctor, I'd like to
21 show you what I'll mark as Exhibit 13 which is a list of
22 companies that I believe you provided professional
23 services to during your career.

24 (Plaintiffs' Exhibit 13 was marked for
25 identification by the court reporter.)

1 BY MR. RUCKDESCHEL:

2 Q And I'd ask that you review Exhibit 13 and
3 tell me whether each of the companies listed here or
4 other organizations are in fact companies or
5 organizations you provided professional services to?

6 A It's a list you put together apparently.

7 Q I put it together based on copies of your CV
8 that are historical, your testimony to Mr. Dumler in
9 the July 2004 case, and a deposition in February given
10 to Mr. Hartley. And I believe it's accurate but I just
11 want you to take a look.

12 A I've done work for all these people except one
13 I don't recognize.

14 Q Can you tell me what that one is?

15 A No. 63, Montgomery County Growth.

16 Q Okay.

17 A It doesn't look familiar.

18 Q Okay. Let me tell you where that came from,
19 that came from an old deposition I believe in the
20 early '90s you gave a creosote deposition for a bank --

21 A Yes.

22 Q Or trust company and one of the named
23 defendants was Montgomery County Growth. Do you know
24 if they were your client at the time?

25 A I know they weren't. The bank case it's --

1 Q There's one company here with a trust in it
2 somewhere. First Federal maybe, was that the --

3 A I don't think it's First Federal. But it's --

4 Q Okay.

5 A It's called Tanglewood is the name of the case.

6 Q We should cross off Montgomery County Growth?

7 A I think so.

8 Q Okay.

9 A And No. 24, Envirollogic Data, I don't know that
10 I ever did work for them. A colleague of mine used to
11 work for them. I don't recall ever doing any work with
12 them. They were a consulting firm that went out of
13 business about 1988.

14 Q Okay. We'll cross them off as well.

15 A And is there such a thing as a Georgia Pacific
16 Railroad, No. 36?

17 Q It came out of a deposition.

18 A I don't know if there is such a thing. There
19 is Georgia Pacific, you know, the corporation Georgia
20 Pacific. I never heard of the Georgia Pacific
21 Railroad.

22 Q Have you performed work for Georgia Pacific
23 Corporation?

24 A Yes, sir.

25 Q Okay. Here. If I could hand you this and

1 prevail on you to cross out 24, 63 and the railroad,
2 from Georgia Pacific Railroad. So to the best of your
3 knowledge is this list accurate?

4 A Yes.

5 Q Okay. I have one more question for you about
6 this before we move on. Can you think of a company
7 that you performed services for that begins with the
8 letter T or the letter X. If you can?

9 A It would be fun, wouldn't it?

10 Q Well, it would be. And that's why I'm asking.

11 A Xerox would be one that would come to mind.
12 But I don't recall that I ever billed Xerox.

13 Q A colleague of mine suggested to me we could
14 put Exxon over the X and just, you know, do it
15 phonetically.

16 A There must be a T over the years. And you're
17 going to tell me that they are all covered otherwise?

18 Q I am, and that's why I had to ask.

19 A I can't think of one right now. But if I do --

20 Q If you do just blurt it out.

21 A Between now and trial I'll let you know.

22 Q If only you had worked for Tanglewood.

23 A Yes, or Texaco.

24 Q Or Texaco. It must be.

25 A You would think somewhere over the years there

1 would be a Texaco case. I just right now can't think
2 of one.

3 Q If it pops in let me know.

4 Back on the substance list. Can you tell me
5 which of these substances you provided testimony in
6 deposition or in trial for or related to? I'm not
7 saying you testified for benzene.

8 A Yeah, how do you want to do this?

9 Q If you just tell me the numbers, obviously
10 No. 1, there's been deposition and trial testimony?

11 A Yes, and No. 2, No. 3.

12 Q Mm-hmm.

13 A Certainly No. 6. Maybe No. 8.

14 Q I'll put a question mark.

15 A No. 11, No. 13, No. 14. You said deposition or
16 trial?

17 Q Yes, sir.

18 A 18, 19, 21, 23, 29, probably 30. 33. I think
19 that's all.

20 Q Have you ever provided testimony in deposition
21 or in trial for any individual claiming to be injured
22 by any of these products?

23 A Not in trial. I've been retained at times for
24 some of the these.

25 Q What about in deposition?

1 A The only one, the only one that would perhaps
2 fit in that category would be methyl bromide.

3 Q Was that a personal injury case or a property
4 damage case?

5 A It was a property damage case that there was a
6 alleged -- no, it was always a property damage case.
7 And no other personal injury cases become to mind.

8 Q Okay, thank you, Doctor.

9 A I guess it's worthwhile saying I'd do it if
10 someone asked me to do it. But I just haven't had the
11 opportunity.

12 Q You haven't been asked?

13 A Right.

14 MR. RUCKDESCHEL: I'm going to mark as
15 Exhibit 14 the September 1986 publication, "Controlling
16 Brake Dust to Protect Your Health, What Every Mechanic
17 Should Know.

18 (Pleadiffs' Exhibit 14 was marked for
19 identification by the court reporter.)

20 BY MR. RUCKDESCHEL:

21 Q Are you familiar with this document?

22 A Yes.

23 Q Do you believe the recommendations in this
24 document are appropriate recommendations to individuals
25 working with brakes?

1 MR. LANKFORD: Objection, vague.

2 THE WITNESS: Do you mean you mean do I think
3 in 1986 was this a series of recommendations that I
4 think would be fine to make?

5 Q Yes.

6 A They would be fine to me.

7 Q Okay. You have discussed in the past in some
8 of your writings the issue of not wanting to warn
9 people in situations where there's not a real risk. Is
10 that a fair say, a reasonable generalization?

11 A What I've said is history tells us that it's
12 not a good idea just to warn for sake of warning
13 because we think that it's democratic, because there is
14 problems associated with overwarning.

15 And I've said in the past, one of them, for
16 example, is right here in California where Prop 65 has
17 encouraged people to have warnings going into the plane
18 and the bathroom and the restaurant and the kitchen.
19 And to the best of my knowledge every study suggests
20 that they are not being read, nor do people give them
21 serious thought. So this de-emphasizes the impact and
22 impact of warnings in general.

23 Q Do you believe that the information provided
24 here in this September 1986 document is an example of a
25 warning that is of such limited value that it falls

1 into this desensitizing, not necessary warning?

2 A I wouldn't put this in the desensitizing
3 category.

4 Q Okay. And would such a, would a warning
5 regarding wearing a respirator when handling brake pads
6 that had asbestos in them in the 1990s be such a
7 warning?

8 THE WITNESS: Can I hear that again?

9 (Record read.)

10 THE WITNESS: It depends on the situation. If
11 you expected that exposures could be anywhere near the
12 PEL then it would be an appropriate warning.

13 BY MR. RUCKDESCHEL:

14 Q And if you didn't expect exposures to be
15 anywhere near the PEL would it be an inappropriate
16 warning?

17 A Not necessarily inappropriate, I just think it
18 would have to be done judiciously.

19 Q Okay. Are any of the activities that you,
20 Dr. Dennis Paustenbach, would expect a brake mechanic
21 to do in 1990s, in the 1990s create in your mind an
22 expectation that there could be exposure levels
23 anywhere near the PEL?

24 THE WITNESS: Could you read that back?

25 (Record read.)

1 THE WITNESS: Your question is too broad
2 because there is all kinds of braking opportunities. If
3 you're talking about autos only?

4 BY MR. RUCKDESCHEL:

5 Q Yes, sir.

6 A I'd be surprised if there were opportunities in
7 the 1990s for people to routinely get exposed above the
8 eight-hour time-weighted average PEL because we're in
9 an area where there is no beveling and no grinding and
10 not many of the brakes have asbestos, certainly not the
11 original equipment.

12 Q So would it be a bad idea from an industrial
13 hygiene perspective to advise people to wear a
14 respirator when just handling asbestos-containing car
15 brake pads in the 1990s?

16 A I wouldn't say it's a bad idea. I just think
17 you need to inform the worker of the pros and cons of
18 wearing a respirator. There is a hazard associated
19 with wearing a respirator. If after he or she is
20 informed of the potential problems of wearing it and
21 the benefits of wearing it, I think it's entirely up to
22 the employee to do that.

23 Q And the information contained in Exhibit 14 is
24 information that would have been as appropriate to give
25 to a brake mechanic 1975 as it was in 1986, would you

1 agree?

2 A Well, the state of knowledge is totally
3 different in 1975 as '86.

4 Q Putting aside issues of state of the art,
5 would the work practices described in the
6 September 1986 pamphlet have been appropriate to
7 recommend to brake mechanics in 1975?

8 A I don't think it would have been harmful to do
9 it. I don't think that there would be a significant
10 risk associated with many of these activities in 1975,
11 but there is nothing wrong with alerting people and
12 educating them about these activities.

13 Q And so --

14 A Even in 1975 if people wished to do that that
15 would be fine.

16 Q To extent that these work practices were
17 appropriate to tell workers about, they would have been
18 as appropriate in 1975 as they were 1986?

19 A I don't know why you're restructuring, you
20 know, the prior question or my answer. I think what I
21 said is fair.

22 Q Well, I'm asking you, Doctor, do you believe
23 that it was appropriate for the EPA to provide these
24 recommendations to brake mechanics in 1986?

25 A I think it's fine for them to do it.

1 Q Okay. And it would have been fine for them to
2 do that in 1975?

3 A If they want to, sure.

4 Q Biologically the dangers to mechanics or
5 potential dangers to mechanics from asbestos in brakes
6 were the same in 1975 and they were in 1986?

7 A As I've said, then and today the risks to brake
8 mechanics, all the evidence is that there is no
9 increased asbestos-related risk. If you want to them
10 how to reduce exposure, that's fine. This is a
11 perfectly good set of materials.

12 Q Reducing exposure is a standard industrial
13 hygiene practice?

14 A Sure.

15 Q And it's an industrial hygiene practice that
16 has been known and discussed in the United States since
17 the 1930s?

18 A Sure. Except you want to keep in mind I
19 wouldn't want you to get the impression that just by
20 reducing exposure always reduces the risk of disease
21 because if there is no risk of disease, reducing
22 exposures below those levels does not help things any.

23 Q Let's talk about risk for a moment. Your
24 opinion is brake mechanics are not at increased risk of
25 developing asbestos-related diseases?

1 A That's what the epidemiology data tells us.

2 Q And that's your opinion?

3 A Yes.

4 Q Okay. Now increased risk when compared to
5 who?

6 A As compared to those that are in the
7 background.

8 Q Okay. And would you agree with me, Doctor,
9 that those in the background all have some level of
10 asbestos exposure?

11 A That's right.

12 Q And that's because there is asbestos in the
13 ambient air?

14 A That's right.

15 Q As we sit here in this room there may well be
16 some asbestos in the air?

17 A I'm sure there is.

18 Q All right. So there is no completely
19 unexposed population in the United States with regard
20 to asbestos?

21 A That's probably true.

22 Q All right. Now also within that do you have
23 an idea as to how many, what percentage of individuals
24 with mesothelioma fall within this persons with no
25 exposure category or no known exposure?

1 A Well, Roggli and others say about 20 or more
2 percent of the mesotheliomas are not due to asbestos.

3 Q Okay. That's a little different question than
4 I asked you, though. And the question that I asked you
5 is what percentage of individuals, whether you have an
6 opinion as to what percentage of individuals with
7 mesothelioma have no known exposure to asbestos, other
8 than ambient.

9 A I don't think I can answer that question.

10 Q Okay. The Spirtas paper estimates, well,
11 defines that 90 percent of the individuals with
12 mesothelioma, the base study, had known exposures to
13 asbestos above ambient?

14 A Yeah, but that doesn't mean for a causal
15 relationship.

16 Q I understand. I understand.

17 A Okay.

18 Q Now the 10 percent, if we use the 10 percent
19 from the Spirtas paper just as an example here, there
20 are individuals in that 10 percent that have been
21 exposed to asbestos beyond the ambient and just don't
22 know it?

23 A Correct.

24 Q Do you have an idea of what percentage of that
25 percentage has exposure and just doesn't know it?

1 A Oh, I wouldn't, I couldn't answer that.

2 Q What would Dr. Roggli's recent papers suggest
3 to us regarding that?

4 A I'm not sure.

5 Q Okay. In order for there to be a measurable
6 increase in risk of automobile and truck brake
7 mechanics, mesothelioma as a result of their work as
8 mechanics, would you agree that the rate of disease
9 would have to exceed the unknown percentage of
10 individuals that have been exposed and get
11 mesothelioma, but don't know about their exposure?

12 MR. LANKFORD: Objection.

13 THE WITNESS: That's a difficult question. I'd
14 like to hear it again.

15 MR. LANKFORD: Read it back.

16 (Record read.)

17 THE WITNESS: Only if you knew precisely the
18 people understood their exposure history. And that's
19 why I can't answer your question. Because it assumes
20 that Spirtas has that, you know, valid data or that
21 Roggli has that valid data.

22 BY MR. RUCKDESCHEL:

23 Q I understand, and if you make that assumption
24 that Spirtas, and I maybe be mispronouncing his name,
25 has valid data, then would my question be correct?

1 A You can't, you only have a certain amount of
2 cases in the pie. So by definition you would have to
3 be correct. But since we know that the data on
4 people's knowledge about their exposures is so flawed
5 it's really very difficult to deal with that question.

6 Q And isn't that a fundamental weakness of
7 epidemiology when looking at the brake mechanic
8 mesothelioma situation?

9 MR. LANKFORD: Vague.

10 THE WITNESS: Actually it would go the other
11 way. See, that's what makes it such a powerful
12 statement to say that the epidemiology today is so
13 favorable. Because if they have unknown exposure it
14 would only make the probability higher of false
15 positives. The fact they are actually at 1 is what is
16 so remarkable.

17 That's why epidemiologists are so impressed
18 with the brake dust studies because if they had unknown
19 exposure to amphiboles then you'd see these mechanics
20 being above 1. But they are not. So it makes it all
21 the more remarkable.

22 Frankly, I'm surprised others haven't thought
23 much more about that. Do you understand what I just
24 said?

25 Q I'm not following. Can you dumb it down?

1 A For example, it's not hard. If you have all
2 these boxes of people --

3 Q Uh-huh.

4 A -- and one of the boxes is a brake mechanic,
5 and he says that all I ever did, was I was a brake
6 mechanic my whole life.

7 And you do a study at these people and they are
8 at 1, in other words, background risk of mesothelioma.
9 And he happens to have forgotten that he was an
10 insulator for a year in the Navy, okay? Or he happens
11 to have forgotten that he cut transite pipe in high
12 school.

13 That would tend, right, to bias, they would
14 tend to have a higher probability of disease. So they
15 might in fact report a 1.5 risk, if we had reported a
16 1.5 risk and then we did a better exposure history or
17 we knew perfectly what they were exposed to, we would
18 see that 1.5 for that group was corrected back to 1
19 after we found out they, you know had these other
20 exposures they had forgotten or didn't know about.

21 The fact that these brake mechanics or
22 mechanics in general, blue collar workers tend to still
23 be at 1 in spite of the fact probably a lot of them had
24 exposure they didn't know about or couldn't remember is
25 all the more remarkable they still outcome out at 1.

1 I'm quite surprised.

2 Q Well, none of the brake mechanic epidemiology
3 studies determine a relative risk of 1, do they?

4 A Well, they all become out at 1 or less or in
5 that vicinity.

6 Q Well, in fact, they all become out
7 substantially less than 1?

8 A I wouldn't they all. But they all are 1 or
9 less.

10 Q There is not a single one at 1?

11 A Well, you know, you're looking at the best
12 estimate value. You're not looking at the error bounds
13 on it. But all the case control studies are 1 or less.
14 Let's just assume that's true.

15 Q Okay.

16 A Unless you want to look at my paper and look at
17 that chart or what?

18 Q No, what I want to do is give you a chart.

19 A Okay.

20 Q But I've lost the chart. I'm losing things,
21 it's later in the day. Here, the one that says
22 "Charts"?

23 A Okay.

24 MR. RUCKDESCHEL: What I'd like to do is take a
25 minute and we'll digress and then we'll come back to

1 this.

2 I want to mark as Exhibit 15 a blank chart that
3 will break up the epidemiology studies. And I'd like to
4 fill this chart in with you, Doctor.

5 (Plaintiffs' Exhibit 15 was marked for
6 identification by the court reporter.)

7 BY MR. RUCKDESCHEL:

8 Q So in the past I believe you testified that
9 you relied primarily on these seven studies?

10 A I don't know if I've said that, but I do rely
11 on those.

12 Q Okay. Well, let's go through these.

13 A Okay. We're going to go ahead and use my 2004
14 paper for reference?

15 Q Sure.

16 A Okay.

17 Q What I'd like to do, Doctor, is have you fill
18 in, I think it would probably be -- all right, you tell
19 me, would it be easier to go study by study or column
20 by column?

21 A It would probably be easier just to go off the
22 record and have me fill it in and then give it back to
23 you in ten minutes.

24 MR. RUCKDESCHEL: Done. Let's go off the
25 record.

1 THE VIDEOGRAPHER: We're off the record. The
2 time is 2:48.

3 (Brief recess.)

4 THE VIDEOGRAPHER: Back on the record. The
5 time is 3:11.

6 BY MR. RUCKDESCHEL:

7 Q Dr. Paustenbach, while we were off the record
8 you were kind enough to fill in for us Plaintiffs'
9 Exhibit 15 which is a chart I had prepared before this
10 deposition regarding epidemiology studies you rely
11 upon. I left a column off of this chart and I
12 apologize -- I'd like to stop for a minute.

13 (Discussion off the record.)

14 BY MR. RUCKDESCHEL:

15 Q Dr. Paustenbach, I left off on the column what
16 the finding of relative risk was pertaining to the
17 studies.

18 A You want the best estimate; is that right?

19 Q Yes, if you would, please, just put that over
20 on the right hand-margin there.

21 A Okay, I'm done. I've filled in the column.

22 Q I'll just fill them in on my copy. Thank you,
23 Doctor.

24 We've got .91, 1.0 for Spirtas, .68 for Teta,
25 1.0 for Woitowitz, .8 for Tesche, and 6.2 for Agudo,

1 1.04 for Hessel.

2 Doctor, the Spirtas paper didn't calculate a
3 relative risk for brake workers; is that correct?

4 A That's right, you had to get it back and
5 calculate it.

6 Q Okay. So that information wasn't presented in
7 the Spirtas paper. The 1.0 comes from where?

8 A It comes from the work of Goodman and others
9 who went back and looked at the data. I think Hessel
10 also was involved.

11 Q Okay. And that is the paper published by your
12 former colleagues at Exponent?

13 A That's right.

14 Q And they did that as well for which other
15 paper? Did they do that for another paper?

16 A I don't recall that they did.

17 Q Did Woitowitz and R~delsperger didn't
18 calculate a relative risk, did they?

19 A I'll have to go back and look. Hold on. There
20 were one or two we had to go back and calculate in the
21 data.

22 Wong reported the relative risk for Woitowitz
23 and R~delsperger, and Spirtas in his follow-up in '94
24 reported a relative risk of 1 for subjects engaged in
25 brake lining, installation or repair. So it's actually

1 a subsequent piece by Spirtas.

2 Q Okay. And so the Woitowitz 1.0 is from the
3 Wong paper?

4 A Yes.

5 Q Not from Woitowitz?

6 A Well, I don't know how Wong, I'll have to go
7 back and look to see if Wong contacted them or not.

8 Q Okay. And did Wong calculate a relative risk
9 in his paper?

10 A I can take a look. That's what my notes say.

11 Q All right.

12 A But we'll take a look.

13 Q I meant an overall relative risk?

14 A You're talking about Woitowitz's paper --

15 Q No.

16 A Not his own -- or for his meta analysis?

17 Q I meant for his meta analysis?

18 A Oh, his meta analysis. I think he did
19 calculate something. It's not in here. Do you want to
20 know the answer to that?

21 Q I would.

22 A Okay. Well, let's see if we can't get it.

23 MR. LANKFORD: This is my copy of the report.

24 MR. RUCKDESCHEL: I have no problem with you
25 showing the witness that copy.

1 MR. LANKFORD: Okay.

2 THE WITNESS: I can read you what it says in
3 Wong's paper.

4 BY MR. RUCKDESCHEL:

5 Q Okay.

6 A He definitely cites a figure for Woitowitz.
7 But your question really had to do with whether or not
8 Wong came up with his own relative risk?

9 Q That's the current question.

10 A Yeah. His relative risk, I'll read to you what
11 he says. In his abstract Wong says:

12 "Based on a meta analysis of the
13 combined data of all six studies
14 consisting of approximately 1500
15 malignant mesothelioma cases, the
16 mesothelioma relative risk for auto
17 mechanics is 0.90 with a confidence
18 interval of .66 to 1.23."

19 Q Okay. And in this chart we've listed in the
20 first column the job classification. And for McDonald
21 and McDonald they just classified workers as garage
22 workers?

23 A Correct.

24 Q We don't know whether those workers were
25 mechanics or not?

1 A That's true.

2 Q And we don't know whether they did brake work
3 or not?

4 A I suppose that's true.

5 Q For any of the individuals that were grouped
6 into that category, garage workers?

7 A You have to infer in most of these studies they
8 did brake work or were overexposed to brake dust.

9 Q That's an assumption that you make?

10 A I think you have to, yeah.

11 Q You have to if you want to rely upon the
12 study, right?

13 A Sure.

14 Q If you don't make that assumption then the
15 study doesn't really tell us anything, does it? With
16 regard to the question.

17 A If they were misclassified where they never
18 really did brake work and they said they did, then the
19 study would have errors in it.

20 Q In the McDonnell study, for example, they
21 didn't ask people whether they worked on brakes, they
22 just said do you work in a garage?

23 A That's right.

24 Q And for the Spirtas study they classified
25 people as having performed brake lining installation,

1 right?

2 A That sounds more like a direct brake worker.

3 Q Okay, and do we know whether the individuals
4 that installed those brake linings ground, beveled or
5 sanded those linings?

6 A That information isn't provided.

7 Q And do we know whether they opened the boxes
8 themselves or whether the boxes were brought to them by
9 a parts boy?

10 A We wouldn't know the level of information based
11 on these studies.

12 Q And with regard to the Teta study the
13 categorization is auto repair and related services,
14 correct?

15 A Correct.

16 Q Were there other categories, other occupations
17 lumped into that category as well? It's on 753 and I
18 don't think there were.

19 A It looks like it was just automobile repair and
20 related services on Table 7.

21 Q Okay, and we don't know whether any of the
22 individuals in that study did brake repair?

23 A Again unless you excluded it you would assume
24 they would since they are involved in automobile
25 repair.

1 Q And we assume that some of them at least did
2 brake repair?

3 A That's right.

4 Q But we don't know for any particular
5 individual whether they did or did not?

6 A That's right.

7 Q And again we don't anything, like with the
8 Spirtas study, we don't know anything about the work
9 practices that were used?

10 A I think in all these all you would know is they
11 were involved in either garage or brake work.

12 Q Okay.

13 A And how much grinding they did or how much
14 sanding they did or beveling they did, would you have
15 to infer that based on the time when they were exposed.

16 Q And even if we were to look at say the 1950s
17 it's my understanding from having read your 2003 paper
18 that in the 1950s not everybody ground?

19 A That's right.

20 Q And not everybody ground all the time of those
21 who did grind?

22 A Well, sure. Of course. If it already fits you
23 don't need to grind it.

24 Q And the same for beveling, not everybody did
25 any beveling?

1 A That's a fact.

2 Q And those that did bevel, some didn't bevel
3 all the time?

4 A As I said before, I don't think anybody beveled
5 all the time.

6 Q And as for sanding?

7 A Rare occurrence.

8 Q So for individuals that did sand the dose
9 would be higher than those other individuals?

10 A All other things being equal. I mean like
11 Mr. Mallia does not talk about grinding so he probably
12 has a much lesser dose than those people that did.

13 Q And with Woitowitz and R~delsperger, the same
14 as the Teta study, we know that they are motor
15 mechanics but we don't whether they did brake work?

16 A That's true.

17 Q And we know nothing about the work practices?

18 A No, not really, I don't know anything about
19 them and they are not reported but --

20 Q Right.

21 A -- I imagine they might know something.

22 Q But for our purposes we just don't know?

23 A That's true.

24 Q And there's no way for us to tell whether they
25 did any of the things that caused release of asbestos

1 dust into the work environment?

2 A We just have to infer that it happened.

3 Q We make that assumption?

4 A That's right.

5 Q And the same for Tesche?

6 A Tesche.

7 Q Tesche?

8 A Same.

9 Q And for Agudo as well?

10 A That's right.

11 Q And then the Hessel paper which is the last
12 row, is just a reanalysis of the Spirtas data from
13 1985?

14 A '94 and '85 as I recall.

15 Q But the data is the same in both papers; is
16 that correct?

17 A I'd have to look at it again to be sure. But
18 that's my recollections.

19 Q We don't the need to get into that. And for
20 all of these we know nothing about the work practices
21 of the individuals?

22 A Not on a per person basis.

23 Q Okay. And you would agree that the work
24 practices varied amongst mechanics?

25 A For sure.

1 Q So in order to find in an ideal world an
2 epidemiological study that gave us a meaningful answer
3 with regard to brake mechanics like Joe Mallia, we
4 would want a cohort of individuals that did the types
5 of things that Joe Mallia did, would you agree?

6 A Unless Joe Mallia performed his job unlike all
7 other people that were mechanics that worked on brakes,
8 you would infer that this wealth of data would be
9 applicable to his work practices.

10 Q We would want to know in an ideal world,
11 Doctor, would we not, we would want to have a cohort of
12 individuals who opened the boxes themselves, who filed
13 the edges like Joe described, who sanded the face in
14 the manner that Joe described, who performed compressed
15 air blowout, who cleaned up in the manner described by
16 Joe, and who did not have any dust control practices in
17 place, correct?

18 A In an ideal world if you could find a cohort
19 that large and you were then trying to look at
20 mesothelioma, then that would be quite a study.

21 Q But that's what we would want to know in an
22 ideal world?

23 A I think maybe the key part of my testimony
24 would be this data set is amazingly strong in spite of
25 what you're describing as possible shortcomings. It's

1 an amazingly strong data set for an occupational cohort
2 for which we can infer disease causation.

3 It is true there are some things that would be
4 ideal, for instance perhaps this cohort's more exposed
5 than Mr. Mallia was, Mallia, and therefore we're
6 talking about exposures that are much greater than what
7 he experienced because he isn't involved in beveling
8 and he's working much later in history than these
9 people.

10 So all I can tell you for purposes of this
11 case, these people were probably exposed I would expect
12 much more than he was in spite of the work practices
13 that he described.

14 Q But you have no factual basis for that
15 statement other than --

16 A Other than I studied all the published
17 information on the issue which is, seems to be a pretty
18 good basis for my view.

19 Q There is no published information regarding
20 work practices of mechanics contemporaneously published
21 in the 50s, is there?

22 A No.

23 Q And the 1960s other than the Hickish study?

24 A No. All you can do is base it on experience
25 through interviews.

1 Q And in the '70s the published information, the
2 most frequently cited piece of published information is
3 the Mt. Sinai study?

4 A No, probably the weakest of all the studies are
5 the Sinai studies. The most important and most
6 frequently cited are the NIOSH study, most cited by
7 those in the exposure assessment world. The most cited
8 perhaps in general are the Sinai ones because they were
9 first.

10 Q Okay.

11 A And because they are in the peer review
12 literature. That's why they get cited. The NIOSH
13 studies don't get cited because they are not in the
14 search engines.

15 Q In the NIOSH studies they began in the late
16 1970s?

17 A Yes.

18 Q And they continued into the 1980s?

19 A That's true.

20 Q And the majority of those studies we're
21 looking for garages that were currently using control
22 methods?

23 A To a large measure that's true.

24 Q And part of that was because they wanted to
25 investigate whether the control methods that were being

1 suggested in things like the EPA handouts were
2 effective in reducing dust levels in garages?

3 A To some degree that's true.

4 Q And you would agree that for garages that were
5 using control methods, to avoid dust release during
6 brake servicing, the numbers that are provided in those
7 tests are not applicable to Joe Mallia in attempting to
8 determine what level of dose he received?

9 A That's right. You can't compare the
10 engineering control situations to the ones that he
11 claimed that he had.

12 Q And you can't compare the no filing
13 information to the filing information that Joe had?

14 A If that I were true, yeah. Filing is not, it
15 doesn't strike me to be one of the big exposure
16 scenarios frankly.

17 Q Why?

18 A Because I think filing is going to involve the
19 generation of larger particles rather than smaller
20 particles just by the very nature of the filing.

21 Q Have you seen any studies that have examined
22 the size of the particles?

23 A I haven't seen a scholarly study of that issue.

24 Q So you're making that assumption?

25 A I am.

1 Q Okay. Do any of these studies control for the
2 age of the party?

3 A You mean the age of the worker?

4 Q Yeah.

5 A I've not seen that.

6 Q Okay. The Agudo --

7 A I'm not sure why that would be important
8 exactly but --

9 Q Let me ask you, do you have the Agudo paper?

10 A I do.

11 Q Agudo didn't attempt to calculate a relative
12 risk for brake mechanics, did he? It's on Page 164,
13 Doctor, in the footnote.

14 MR. LANKFORD: Could you read back the
15 question?

16 BY MR. RUCKDESCHEL:

17 Q I'll just say it again. Agudo didn't
18 calculate a relative risk for motor vehicle
19 mechanics; is that correct?

20 A He calculated an odds ratio rather than
21 relative risk. Is that what you meant?

22 Q Right. Agudo didn't calculate an odds ratio
23 for motor vehicle mechanics; is that correct?

24 A He called it for mechanics, motor vehicles. At
25 least that's the way Goodman interprets it on Page 316.

1 Q Okay. If we look at Agudo --

2 A Mm-hmm.

3 Q -- and we look at Footnote A on Page 164 it
4 states:

5 "Only occupations that at least five
6 cases where a significant odds ratio are
7 presented in the table."

8 A Mm-hmm.

9 Q Do you know of anywhere else in this paper
10 other than the table where they report the relative
11 risk for mechanics?

12 A Well, all I can say is how others have
13 interpreted his data.

14 Q Okay. And so while one can take the data and
15 calculate the odds ratio, Agudo didn't do that?

16 A That's fair.

17 Q Okay. And Page 162 of Agudo's paper, there is
18 a statement, quote:

19 "Compared to those who never worked
20 or who were considered as never exposed,
21 all levels of probability and intensity
22 had an increased significant risk except
23 subjects with low probability of
24 exposure."

25 Do you see that sentence?

1 A Yes.

2 Q Now Joe Mallia would fall into the category,
3 would not be in the -- I'm sorry, let me start over.

4 Joe Mallia would not be in the low probability
5 of exposure category?

6 A I wouldn't think so.

7 Q Okay. And so under the data presented here in
8 Agudo dude Joe would fall into a classification that
9 had an increased significant risk, correct?

10 A I wouldn't make that inference, no.

11 MR. LANKFORD: Objection.

12 THE WITNESS: You're taking a sentence out of
13 context and not looking at the data. I would look at
14 the data first and not try to generalize from the text.

15 BY MR. RUCKDESCHEL:

16 Q Have you done so?

17 A I'm relying on Goodman and Wong.

18 Q Okay. Let's turn to the next page, 163, and
19 there is a sentence in the left-hand column of the
20 text:

21 "The analysis on probability of
22 asbestos exposure was restricted to some
23 subgroups, subjects younger 55 years,
24 eleven cases and four controls, showed an
25 odds ratio of 10, confidence interval of

1 1.86 to 53.9 for the category of sure
2 exposure."

3 Now Joe Mallia falls into the category of sure
4 exposure, does he not?

5 A Are you trying to bootstrap from this general
6 statement to Joe Mallia? You can't do that. These
7 sure exposures are for people that really got exposed,
8 not for marginally exposed people like Joe Mallia.

9 Q Well, Agudo looks at two things, right? Agudo
10 looks at probability of exposure?

11 A Right.

12 Q And Agudo looks at intensity of exposure?

13 A That's right.

14 Q Okay. And in this sentence Agudo is a
15 referring to the analysis of the probability of the
16 exposure segment of the paper?

17 A That's right.

18 Q And Agudo concludes that those in the category
19 of sure exposure, and Joe was certainly exposed to
20 asbestos, there was an odds ratio of 10?

21 A But he doesn't place the mechanics in that box
22 in this paper.

23 Q What box does he place the mechanics in?

24 A He doesn't place them in that box.

25 Q What box does he place them?

1 A Okay, my reading of this is that he's got the
2 people in Table 4 in the box of high exposure. As he
3 says in his text, the bottom of Page 163:

4 "A total of 39 occupations were
5 considered as occupation at risk of
6 asbestos exposure according to their
7 probability score, Table 4."

8 And he listed those with the highest. And
9 then at the bottom he says, "Any occupation with high
10 risk of asbestos A," and he defines that based on his
11 odds ratio. I don't think he had the five-case minimum
12 here that I think he was using for his minimum
13 definition for the categorization. So I've inferred
14 that he doesn't put them in that box.

15 Q Let's take us out of the discussion then of
16 Agudo then if they don't have the five-case minimum,
17 and let's talk about Joe. Let's talk about Joe Mallia.

18 Joe Mallia definitely was exposed to asbestos
19 in his work as a mechanic if you believe his testimony?

20 A Yes, sir.

21 Q What is attributable risk in epidemiological
22 terms?

23 A I don't know that I could give you the exact
24 epidemiological definition.

25 Q What is your understanding? Give me a

1 layman's description of attributable risk.

2 A That risk that can be identified to be
3 associated with a particular type of exposure.

4 Q Before we progress with that I had another
5 question I forgot to ask you earlier. Can you name for
6 me any peer review publication that labels as
7 idiopathic a mesothelioma with demonstrable asbestos
8 exposure?

9 MR. LANKFORD: Objection, vague, overbroad,
10 ambiguous.

11 THE WITNESS: I don't know that such an
12 analysis has been done. I mean I've never seen anybody
13 sit down and say that they had reached such conclusions
14 and put it in the peer-reviewed literature. It might be
15 a useful thing to do but I've not seen it.

16 BY MR. RUCKDESCHEL:

17 Q The way the term "idiopathic" has been used in
18 the peer-reviewed literature has historically referred
19 to no known asbestos exposure, correct?

20 MR. LANKFORD: Objection, are you talk about
21 occasional, what we talking about in this room?

22 THE WITNESS: Let's go back to the question. I
23 don't think you meant to ask what you said. Do you want
24 to hear it back or do you want to do it again?

25 BY MR. RUCKDESCHEL:

1 Q Let's do it again. The term "idiopathic" --

2 A In general now, not asbestos. Because you went
3 from general to asbestos.

4 Q In asbestos --

5 A Okay.

6 Q -- has been used in the peer-reviewed
7 literature to describe individuals with no known
8 exposure to asbestos above ambient?

9 A That and no significant exposure to radiation.

10 Q Okay.

11 A I think you have to satisfy those two criteria.

12 Q Let's take radiation out just so --

13 A Some people take the simian virus as well.

14 Q Right.

15 A But let's just say if you take those two out
16 plus asbestos then they normally would say idiopathic.

17 Q Let's talk about the monkey virus for a
18 second.

19 A Okay.

20 Q Do you believe that the monkey virus, SV-40
21 causes mesothelioma?

22 A I think the data are inadequate at this time.

23 Q Okay. Now if we exclude cases of radiation,
24 would you agree that in the peer-reviewed literature
25 with respect to asbestos, the term "idiopathic" has

1 been used historically to describe cases with no known
2 exposure to asbestos other than ambient?

3 A Yes, other than radiation, that's true.

4 Q Okay.

5 A Historically.

6 Q Right. And you cannot identify for me as we
7 sit here today a paper that has used that, a
8 peer-reviewed paper that has used that term
9 differently?

10 A None comes to mind.

11 Q All right.

12 A There may be some but none comes to mind.

13 Q I understand you're not a walking library.

14 A Not like you, Counsel.

15 Q Now with regard to the term "attributable
16 risk," can you describe that for me, and again I
17 apologize.

18 A As I recall it's generally used, if you had
19 three possible exposures to asbestos, one is a
20 bricklayer layer, one is an insulator and then let's
21 say a brake mechanic, where would you attribute the
22 risks, the overall risk would be. Which page are you
23 on?

24 Q I'm looking at the Spirtas paper from 1994.

25 A Okay, which page?

1 Q I'm looking at Page 809 in the discussion
2 section?

3 A Mm-hmm.

4 Q The sentence that begins, "We found slight..."
5 It's on the left-hand column about two-thirds of the
6 way down. And the sentence states, quote: "

7 We found slightly but generally
8 higher partial ARs among the younger mail
9 cases."

10 Can you tell me what Spirtas is referring to
11 there in the discussion?

12 A Not having spent more time on it than what
13 we've done here in the last few minutes, I think my
14 definition is still okay.

15 His discussion of attributable risk begins on
16 Page 808 in the last paragraph, and I think what he's
17 saying is, I'm trying to assign the likelihood of
18 disease to a particular cause, and he's talking about
19 whether or not the mesotheliomas are likely to be due
20 to exposure to asbestos in general or he raises the
21 question about the type of asbestos fiber. And he says
22 this is difficult to do with the available information.
23 And that's what I take from this.

24 Q Would you agree that that's difficult to do
25 with the available information?

1 A At that time and even today it's very difficult
2 to tease out. We have only gotten better at it the
3 last few years.

4 Q And Spirtas found that amongst younger male
5 cases there was higher attributable risk to asbestos
6 exposure for the mesothelioma cases?

7 A Yeah, I think what he's saying is those younger
8 people may well have had exposures to the amphiboles
9 versus the older people. And I think that's what he's
10 trying to tease out. He's unable to do that.

11 Q What the study found, though, Doctor, is what
12 is discussed by Mr. Spirtas, for example, on Page 808
13 in the first complete paragraph on the right-hand
14 column:

15 "Results by decade of first exposure
16 were complimentary to those for latency
17 with the two likelihood measures showing
18 higher risks for subjects exposed earlier
19 and the ever or never questions showing
20 the highest risk among subjects beginning
21 exposure most recently."

22 That's consistent with what Dr. Agudo found
23 that the highest risk is found in the cohort, ever
24 exposed, versus the ones that believe they were never
25 exposed?

1 A I'm not surprised at that.

2 Q Okay. What are some of the ways that you
3 judge the quality of an epidemiological study?

4 A Well, what do I consider?

5 Q Yeah, Dr. Paustenbach, what are some of the
6 ways you, Dr. Paustenbach, judge the quality of an
7 epidemiological study?

8 A I look at the journal it's in right away.
9 There are certain journals that are more rigorous than
10 others with respect to the threshold as to whether they
11 are considered good or average quality studies. I
12 looked at the size of the cohort, the exposure
13 information, the length of time that the study, the
14 people in the study were evaluated.

15 I look to see if they are using qualitative or
16 quantitative descriptions of exposure. I look to see
17 if the results are consistent or inconsistent with
18 other people who have studied the same issue. I like
19 to see if there is confounding variables, especially in
20 the kind of work that I do.

21 I want to see if there are alternate sources of
22 exposure to that same chemical versus the occupation
23 being evaluated. I like to look at the statistical
24 strength of the results, and I'm particularly
25 interested in the size of the background that is

1 evaluated. That is, the background population and the
2 background exposures.

3 And then of course if it's a rare disease you
4 want to have confirmation from the pathologies,
5 pathologists if it's a difficult diagnosis. And then I
6 look at latency. I make sure chronicity is right.
7 Chronicity.

8 Q Temporal sequence?

9 A Thank you, temporal sequence.

10 Q Did the egg become before the chicken?

11 A There you go. And then, you know, all of us
12 like to look at the Hill criteria and coax postulates
13 and try to borrow from other theorists as to whether or
14 not it meets some of the criteria for acceptability.

15 Q You used the phrase "criteria" with regard to
16 Dr. Hill. Dr. Hill indicates in his seminal paper
17 where he discusses these factors that no single factor
18 or specific combination of factors is necessary to draw
19 a scientifically valid conclusion from analysis of the
20 data. Is that fair to say?

21 A Oh, in a manner of speaking, among other
22 things.

23 Q They are not rigid criteria in the sense you
24 have to check off every box?

25 A I think that's true.

1 Q Okay. You mentioned diagnosis, latency and
2 temporal sequence. Diagnosis, you would agree Joe
3 Mallia has mesothelioma?

4 A He does. It may not be the classic asbestos
5 mesothelioma but I'm not here to offer that opinion.

6 Q All right. And you would agree there's been
7 sufficient latency since Joe's exposure to asbestos for
8 him to have developed an asbestos-related malignancy?

9 A I think his latency is okay.

10 Q Okay. And temporal sequence works out in this
11 case?

12 A Temporal sequence is ment.

13 Q Works out badly for Joe but works out fine for
14 this analysis?

15 A It's not surprising.

16 Q Okay.

17 A If it's related to exposure.

18 Q You mentioned confounders and alternate
19 sources. Would you -- is it fair to say that a
20 substantial portion of your professional activities
21 over the last 15 years has been involved in looking for
22 confounders or alternate sources for exposure to toxic
23 substances? Confounders for --

24 A I wouldn't say that at all.

25 Q Okay. You've done so with benzene, though?

1 Have you?

2 A No. I mean I have at times, of course. But I
3 mean to say that my specialty is to try to point the
4 finger at other chemicals that cause someone's disease
5 that would be both inflammatory and incorrect. I
6 almost never get in situations where that occurs,
7 frankly.

8 And by the way, what we're going over is you
9 can't take the Bradford Hill criteria for evaluating
10 quality of a study and a causal link and apply to it an
11 individual very easily. Those are meant for evaluating
12 studies.

13 They are in part used, of course, too, for
14 evaluating the likelihood that a particular person has
15 a causal link but they were intended for studies.

16 Q Sure.

17 A I mean it makes for a nice story for court what
18 you've just done, but it's not exactly what they had in
19 mind.

20 Q Do individuals who are engaged in boiler
21 installation and repair have an increased relative risk
22 of mesothelioma?

23 A Historically, yes.

24 Q Okay. Do you have an opinion or any
25 understanding of what the level of that relative risk

1 may be for boiler installers? And I'm looking sort of
2 ballpark. Is it 10, is it 5, is it 2?

3 A It's somewhere between 2 and 10 is my
4 recollection. I think they are in my chart. Tesche
5 look at that.

6 MR. LANKFORD: Which test?

7 THE WITNESS: Boiler installers. It's not in
8 my chart. My recollection is between 2 and 10 or 2 and
9 8, somewhere in there.

10 BY MR. RUCKDESCHEL:

11 Q Okay. What about for plumbing, heating
12 repair?

13 A That one is harder.

14 MR. LANKFORD: Object.

15 THE WITNESS: Are you looking at Spirtas?

16 BY MR. RUCKDESCHEL:

17 Q I'm not.

18 A Plumbing and heating repair. Again, that's
19 historical. You'd have to tell me what year. Because
20 if you said 2005 for people that entered the trade in
21 1985 I'd probably say there may be no increased risk.

22 Q I'm discussing for individuals where there
23 would be sufficient latency for them to be reported in
24 the literature now. So it would be exposure prior to
25 1985.

1 MR. LANKFORD: Objection.

2 THE WITNESS: Yeah, I think if I knew more
3 where you were going I'd like to help you get through
4 these questions because of the time of today. What is
5 it that you want to get out of this line of questions?

6 Q Well --

7 A There are certainly, of the craftsmen there can
8 be an increased risk depending on the era and the
9 location in which these craftsmen work. There is no
10 question about that.

11 Q So for the era that the 19, 1985 --

12 A If the exposures are occurring post-1985, the
13 increased risk for people who start to become exposed
14 in '85 is very low.

15 Q Let's talk about the first Spirtas paper if we
16 could, and I don't think I have a copy of it with me
17 but I know you got one there. If we were looking for
18 the time frame studied by them?

19 THE WITNESS: Jen, would you give me the first
20 Spirtas paper? I just have the second one here.

21 BY MR. RUCKDESCHEL:

22 Q May I reach across, Doctor, and take the
23 chart?

24 A Certainly.

25 This isn't it. Yes, it is, okay.

1 Q If we look at people from that time period,
2 and I'm just looking for that marker, what was the time
3 period they published this paper? It was '85, right?

4 A It came out in '85. It involves telephone
5 interviews of next of kin from 1975 to 1980. So these
6 people were exposed pre-'75.

7 Q Okay. And for that group of individuals do
8 you have a, what would you expect the relative risk for
9 insulators during that time to be, do you have a --

10 A Depends what kind of insulators. If they are
11 in the shipyard, you know, it's fairly high.

12 Q Okay.

13 A I think 7 to 10 is not unusual in the
14 shipyards. Especially if they are smokers.

15 Q That's not relevant -- and for nonshipbuilding
16 insulators do you have an idea?

17 A Well, they got the boiler installation at 4.5,
18 shipbuilding; shipyard, 4.3 according to Spirtas. I
19 don't know if I can be any --

20 Q Okay. What did they have for, did they look
21 at construction or demolition, Spirtas?

22 MR. LANKFORD: I don't know if your purpose is
23 completely limited to this but I don't know if you
24 caught my statement earlier that he's not offering any
25 opinions with respect to alternative exposures.

1 MR. RUCKDESCHEL: I understand. Thank you.

2 THE WITNESS: Why don't I just read it. That
3 way you'll know.

4 BY MR. RUCKDESCHEL:

5 Q Sure.

6 A We will just get the record straight. In
7 Spirtas, '86, these are the results, quotes:

8 "Job and nonjob-related activities
9 with known or suspected asbestos
10 exposures have the following odds ratios
11 (in 95 percent confidence intervals):
12 Furnace or boiler installation repair,
13 4.5. Shipbuilding, ship demolition or
14 shipyard work, 4.3. Insulation, 3.2.
15 Elevator installation or repair, 1.9.
16 Building demolition, 1.4. Plumbing or
17 heating repair, 1.3. Production of
18 textiles, 1.3. Brake lining installation
19 or repair, 1.0. Production of paper
20 products, 0.8."

21 And that's the end of this quote.

22 Q Doctor, I'd like to move on. I don't think
23 we're going to go anywhere with this one.

24 A Okay.

25 MR. RUCKDESCHEL: Take a look at Exhibit 16

1 which is the Hessel 2004 paper.

2 (Plaintiffs' Exhibit 16 was marked for
3 identification by the court reporter.)

4 BY MR. RUCKDESCHEL:

5 Q Are you familiar with this article?

6 A Yes.

7 Q Do you rely upon this article?

8 A Yes.

9 Q Can you explain to me, Doctor, Page 550, why
10 the odds ratio for nonoccupational brake work is higher
11 than the odds ratio for occupational brake work?

12 A Well, there is no difference between the two.
13 They are virtually identical. You can't defer anything
14 from that. The confidence intervals are completely --

15 Q In the chart you did, Exhibit 15, Doctor,
16 column, the fifth column, the last typed column has
17 been "Statistically Significant," and you crossed off
18 the word "Significant" and inserted the word "Increased
19 Risk." Why?

20 A It's because it's a statistically increased
21 risk versus background.

22 Q Doctor, if the confidence interval of an
23 epidemiological study spans 1, by definition the
24 results of the study are not statistically significant?

25 A Right.

1 Q Okay. So if we were to make these two
2 columns, "Statistically Significant" and then one
3 "Statistically Increased Risk" your answer for
4 Statistical Significance would be no all the way down
5 as well?

6 A That's right.

7 Q Okay. And that means if we repeated the
8 study, the repeat study would fall somewhere within the
9 confidence interval?

10 A That's what you expect.

11 Q And 95 percent of the time it would fall
12 within that range.

13 A That's right.

14 Q So a study if we looked at of McDonald and
15 McDonald that was repeated and found a relative risk of
16 2 would be consistent statistically with the study
17 performed by McDonald and McDonald?

18 A I guess, that would be fair.

19 Q Yeah. All I want to do is be fair. Let's
20 move on.

21 I want to ask you about OSHA. If General
22 Motors has a factory and they make brakes in the
23 factory, and General Motors does a dust test and they
24 find that employee, hypothetical Employee Smith, just
25 so counsel from General Motors is fully aware I'm

1 talking hypothetical Employee Smith, is exposed to a
2 level of asbestos dust over the OSHA PEL at the time,
3 has General Motors violated OSHA?

4 MR. LANKFORD: Objection.

5 THE WITNESS: Your question is if after 1972 a
6 sample is collected and it's a time-weighted average
7 sample, and that sample is over the contemporaneous PEL,
8 have they violated OSHA?

9 BY MR. RUCKDESCHEL:

10 Q Correct.

11 A They would be over the OSHA guideline if the
12 person was not wearing a respirator some of the time,
13 that would be considered above the guideline. It
14 wouldn't be a violation unless the OSHA inspector was
15 there and took the sample that day.

16 Q So it's only a violation if OSHA is there?

17 A Sure, because the violation means they've been
18 cited.

19 Q It's like speeding. You're not speeding
20 unless you get the radar and you get a ticket?

21 A It's not like speeding. I think if you said to
22 me did you get a violation for going over the speed
23 limit, then I would say if you got a ticket you got a
24 violation. That's different than asking me if they
25 were speeding. Do you see the difference? You asked

1 me about violations.

2 Q Well, I did.

3 A If you go over the speed limit everyday for a
4 week but you never get a ticket you haven't got a
5 violation.

6 Q If I rob a store and I don't get caught have I
7 submitted a crime?

8 A Yes.

9 Q Okay. If I violate OSHA but I don't get
10 caught have I committed a violation?

11 A Well, not exactly because you are supposed to
12 demonstrate a statistical confidence that you're below
13 the guideline. You can be above the guideline and feel
14 comfortable you have a safe and healthy workplace as
15 long as you statistically meet their criteria for
16 acceptability. So if 95 percent of the time you're
17 significantly below the standard and you're slightly
18 above one of the times, they would not consider you in
19 violation. That is, they would not consider it an
20 unhealthy workplace is what I should say.

21 Q Well, if you have a factory that has dust
22 levels that are in excess of the OSHA PEL 360 days out
23 of the year, and five days of the year the OSHA
24 inspector comes, which would be an inordinate amount,
25 about five days out of the year the OSHA inspector

1 comes on those days they clean up their work practices
2 and they have exposures under the PEL during the time
3 the OSHA inspector is there, is that factory in
4 violation of OSHA?

5 MR. LANKFORD: Objection.

6 THE WITNESS: Technically they haven't got a
7 violation but they are not in compliance. I think the
8 term you're looking for is compliant. They are not
9 compliant with the OSHA regulation. That's the correct
10 term, compliant.

11 BY MR. RUCKDESCHEL:

12 Q They are committing a violation, they just
13 haven't been caught?

14 A No, don't put words in my mouth. I said they
15 are not compliant. That's the terminology.

16 Q Would you agree, Doctor, that the fewer number
17 of samples we have historically regarding a particular
18 work practice, the less useful the information is in
19 making particular determinations regarding any
20 particular individual?

21 THE WITNESS: Can I hear that again.)

22 THE REPORTER: You'll have to say it again.

23 Can we take a break.

24 MR. RUCKDESCHEL: Sure.

25 (Brief recess.)

1 THE VIDEOGRAPHER: Back on the record. The
2 time is 4:16.

3 BY MR. RUCKDESCHEL:

4 Q Dr. Paustenbach, would you agree that in
5 looking at cases like this case, the fewer number of
6 historical samples relating to dose we have of
7 individuals who've used work practices like Joe Mallia,
8 the less relevant the information is in being able to
9 determine what dose Joe received from his work as a
10 brake mechanic?

11 A Yes.

12 MR. RUCKDESCHEL: Okay. Let's look at
13 Exhibit 17.

14 (Plaintiffs' Exhibit 17 was marked for
15 identification by the court reporter.)

16 BY MR. RUCKDESCHEL:

17 Q I want to ask you some general issues in your
18 toxicology hat regarding asbestos fiber types and four
19 types of disease caused by asbestos, pleural plaques,
20 asbestosis, lung cancer and mesothelioma. I'd like you
21 to do is just put a yes or no in the boxes or something
22 else, if it's "don't know," or "maybe," whatever else
23 you need to put in there with regard to this --

24 A And these are at any dose?

25 Q That's correct. I'm referring to the question

1 of biological capability of causing that condition.

2 Okay. Doctor, you've completed the chart.

3 Have you done so to the best of your ability?

4 A Without looking at any references, that's the
5 best I can do.

6 Q Okay. I notice that you have marked off that
7 pleural plaques can be cautioned by chrysotile
8 asbestos?

9 A That's my recollection.

10 Q Is it your understanding that asbestos must
11 reach the pleura to cause pleural fibrosis?

12 A That's my understanding.

13 Q And so is it also your understanding that
14 chrysotile asbestos reaches the pleura?

15 A Some of it can.

16 Q Okay. I don't have any further questions for
17 you on that exhibit.

18 Is it necessary to have an epidemiological
19 study that shows a relative risk of greater than 2 of
20 developing asbestosis amongst brake workers to
21 attribute asbestosis in a specific brake worker to that
22 individual's work assuming that you have a careful work
23 history?

24 MR. LANKFORD: Objection.

25 THE WITNESS: Can hear that again?

1 (Record read.)

2 THE WITNESS: I know you got it right but let
3 me hear it one more time.

4 (Record read.)

5 THE WITNESS: No, you wouldn't have to have an
6 epidemiological study showing something greater than 2.
7 I think I've opined before that one can envision an
8 implausible scenario where asbestosis could be caused in
9 a brake worker. I don't know that, you know, I have not
10 read of any situation where that was likely to occur but
11 I can imagine how it could happen.

12 BY MR. RUCKDESCHEL:

13 Q Okay. And I'm not -- I appreciate that
14 answer, Doctor. My, what I want to get at is an issue
15 of risk and an issue of likelihood, and there is an
16 issue of an individual. And those two issues are
17 different. Would you agree?

18 A Yes.

19 Q And in a specific individual, that individual
20 has their own exposure history, and that individual may
21 have a disease, and that disease may be caused by the
22 exposure history in that individual. Would you agree?

23 A Yes.

24 Q Causation in the individual may occur in
25 actuality, even though there is no measurable increase

1 in the relative risk for persons in that job category.

2 Would you agree?

3 MR. LANKFORD: Objection.

4 THE WITNESS: I understand your question to be
5 is it possible that a person who has a disease have that
6 disease or as a result of exposure even though there was
7 no epidemiology study that has ever been conducted that
8 showed greater than a relative risk of 2. That's what I
9 hear your question to be.

10 BY MR. RUCKDESCHEL:

11 Q It's close. Why don't you answer your
12 question and we'll see if you need to answer another.

13 A You could speculate or say it was plausible
14 that that person's disease was associated with their
15 work, but you wouldn't have sufficient scientific
16 evidence to support that.

17 Q Okay. Now are there agents where there has
18 been in your mind sufficient scientific evidence to
19 make an individual causation basis, determination, even
20 though there is no epidemiology? For example, vinyl
21 chloride?

22 A You know I've talked about this before. I've
23 had this the question three or four times. And I've
24 mentioned vinyl chloride.

25 Q That's why I brought it up as an example.

1 A I've mentioned bischloromethyl ether. You
2 could look at some of the classic occupational
3 carcinogens of the 40s and '50s and you'd end up with
4 the same answer. And the nitrophenols.

5 Q And Wagner's report on mesotheliomas amongst
6 the miners in South Africa in 1962?

7 A I think some people say that, yes. You mean
8 1960.

9 Q '60, I'm sorry.

10 A Yeah. I mean there are situations. I mean the
11 so-called classic occupational carcinogens fit in that
12 box.

13 MR. RUCKDESCHEL: I'm going to mark as
14 Exhibit 18, "The Epidemiology of Asbestos-Related
15 Diseases in Quebec."

16 (Plaintiffs' Exhibit 18 was marked for
17 identification by the court reporter.)

18 BY MR. RUCKDESCHEL:

19 Q Are you familiar with that document?

20 A Yeah, I've seen it.

21 Q Okay. I have a specific and very limited
22 question for you so I don't think it's necessary for
23 you to read it all.

24 A No, I'll just wait for your question.

25 Q Okay. If I could have it back. There is a

1 statement in the summary section at the end of this
2 document on Page 71, and I'll read it to you, quote:

3 "Mesothelioma and pulmonary cancer
4 risks were not as high following a low
5 exposure to the two types of asbestos
6 fibres [in brackets here, they are
7 talking about amphibole and chrysotile on
8 the previous page] and did not reach the
9 statistically significant level. This
10 may be interpreted in two ways, either at
11 a low exposure, there is no detectable
12 risk, or at a lower exposure, the risk is
13 slight and real. In the latter case, the
14 large proportion of cases of the two
15 cancers among asbestos exposure was low,
16 rather than high, could make this a
17 non-trivial risk."

18 Do you agree with that statement? It's the
19 second flag I've highlighted.

20 A I think the statement means that it's possible
21 the amphiboles could be a significant risk and not be
22 demonstrated as such statistically. And in that case I
23 would agree.

24 Q Okay. So if we limit it to amphiboles, we
25 limit that statement to amphiboles -- and I don't

1 believe that's what the statement says but that's
2 neither here or there.

3 A I'd have to spend more time with the document.

4 Q If we limit it to amphiboles, because the
5 consequences of developing mesothelioma are so high, if
6 there is a low, and in fact so low it cannot be
7 statistically measured, risk of mesothelioma at low
8 levels of exposure, that risk is non-trivial, you would
9 agree?

10 A Yeah, that's another aspect of risk assessment
11 which is either the likelihood or the significance of
12 the impact when it occurs. And that is what this is
13 about. And because mesothelioma has significant impact
14 it warrants special recognition.

15 Q It has the ultimate impact?

16 A Sure.

17 Q People with mesothelioma die?

18 A That's right.

19 Q And unless they get hit by a bus or struck by
20 lightning they die from the mesothelioma?

21 A That's right.

22 Q And Joe Mallia is going to die from his
23 mesothelioma?

24 A I suspect that's true but I --

25 MR. LANKFORD: Calls for a medical opinion.

1 THE WITNESS: -- but it's not something I
2 should opine about.

3 BY MR. RUCKDESCHEL:

4 Q Okay. Reasonableness with respect to health
5 hazards and warnings and corporate behavior involves
6 consideration of a variety of factors, do you agree?

7 A Yes.

8 Q And you opine upon reasonableness in this
9 case?

10 A Yes.

11 Q Would you agree as the magnitude of a
12 potential harm goes up more care is needed?

13 A Yes.

14 Q And as the likelihood of more harm goes up
15 more care is needed?

16 A Yes.

17 Q Would you agree that with respect to the
18 benefit provided to the individual who is subjected to
19 the risk, if the benefit is indirect, more care is
20 needed to protect that individual?

21 A I've never heard it put that way. I don't
22 think that segue would weigh into a sense of corporate
23 responsibility. I don't think could you do that.

24 Q Let's think about it from a --

25 A I tell you what. You said this earlier in the

1 day. I think we may be talking by each other on the
2 definition of "indirect." So we need to probably
3 define that.

4 Q Okay, let's do that. Did Joe Mallia receive a
5 direct benefit from there being asbestos in brakes?

6 A Not personally.

7 Q Okay. Asbestos was included in brakes because
8 it worked pretty well?

9 A True.

10 Q And it was relatively inexpensive?

11 A Yes.

12 Q And it was going to cost money and take some
13 time and engineering effort to get it out of brakes?

14 A No, I would say it was thought to be safe and
15 effective and on a cost -- or actually on risk/benefit
16 basis, substituting it was thought to cause more of a
17 risk to society than leaving it in. At least that was
18 the prevailing thought for a long time.

19 Q Was that the prevailing thought in 1971 at
20 Ford?

21 A I can't say that they had made a decision that
22 was exclusively based on automotive safety in 1971. By
23 1971 other factors were coming into play. Your
24 question is sort of would they have chosen to stay with
25 asbestos-containing brakes knowing what they knew about

1 safety in general. I suppose if there was absolutely
2 no regulatory or litigation issues they might well have
3 chosen to do that because at the time substitutes were
4 feared with respect to their ability to protect people
5 driving vehicles.

6 You know, I said this before, the challenges of
7 coming up with a brake that almost anybody that install
8 that works at 40 degrees below zero in Bemidji in the
9 winter and works well at 140 degrees across the desert,
10 and they both stop the cars equally well under those
11 conditions was a special feat.

12 And to put that into jeopardy, which is what
13 they were doing when they were trying to substitute
14 other materials, was something that all these firms had
15 to take very seriously.

16 Q It was an engineering exercise?

17 A It was a real engineering challenge.

18 Q What materials substituted for asbestos?

19 A Ultimately?

20 Q Yes, sir.

21 A Well, there's a combination of materials.

22 Q Tell me what they are.

23 A They varied. Some people use metal filings,
24 some people used cashew and walnut shells. It's
25 actually a cocktail. Kevlar. Sometimes other fibrous

1 materials. So it's a mixture that they eventually
2 thought gave it the same performance.

3 So that's where we are today. I mean to my
4 surprise, you know, there is a question about this this
5 moment in some countries because they are seeing an
6 elevation in the ambient air levels of trace metals
7 that in brake linings.

8 I got from Australia, actually an e-mail,
9 asking my views on this matter as to whether they
10 should get to chrysotile asbestos as a reasonable
11 substitute on a risk/benefit analysis. So to my
12 surprise this is still something that's being
13 discussed.

14 It's a chose call. It's a fascinating thing.
15 We have a very high expectation about a car stopping
16 when we want it to stop under all these different
17 conditions.

18 Q With regard to at least the front brakes on
19 Ford cars, would you agree that by 1971 Ford had
20 developed substitute materials that worked equally well
21 from an engineering standpoint as asbestos?

22 A You know, I can't give you an opinion about
23 equally well. I can tell you they considered it
24 adequate.

25 Q Okay.

1 A I don't know if I can, I can't -- I haven't
2 looked to see if it was equal.

3 Q Okay. What would it have cost Ford to
4 substitute nonasbestos brakes on the front wheels of
5 their vehicles at that time on a --

6 A In 1971?

7 Q Yes, on per vehicle basis?

8 A I don't know. I have not evaluated that.

9 Q Have you seen documents that discuss that?

10 A I haven't.

11 Q Does the difficulty or expense of reducing a
12 risk play a part in the corporate determination of
13 whether to eliminate the risk or not?

14 MR. LANKFORD: Objection.

15 THE WITNESS: Well, I wouldn't say it's a
16 corporate determination. I would call it more a
17 societal determination. We do it all the time
18 societally.

19 BY MR. RUCKDESCHEL:

20 Q Companies do it, too?

21 A Well, it depends on what kind of risk you're
22 talking about. They certainly do it with respect to
23 certain risks.

24 Q Okay. When you considered whether the
25 corporations in this case acted reasonably in issuing

1 their opinion, did you consider cost of developing
2 alternative materials to substitute out for asbestos in
3 making that determination?

4 A I didn't have to because there was no evidence
5 during the journey of the last 40 years that there was
6 a risk. So I didn't have to do that analysis.

7 Q Your analysis of reasonableness is based on
8 the conclusion that there is a risk?

9 A No, actually it was a, it was based on evidence
10 as time moved forward, that there was no risk and they
11 were moving to eliminate the asbestos anyway. The two
12 thoughts or the two processes in motion simultaneously
13 created reasonableness.

14 Q What level of risk of development of
15 mesothelioma would the epidemiology studies that are on
16 Exhibit 15 detect?

17 THE WITNESS: Can I hear that again, please?

18 (Record read.)

19 THE WITNESS: I don't know how to answer that.

20 BY MR. RUCKDESCHEL:

21 Q Would they detect a 1-in-10,000 risk?

22 A Oh, that's your question.

23 Q That is my question. We'll make that my
24 question. And then we can change the number.

25 A I can't see a 1-in-10,000 risk.

1 Q Can they detect a 1-in-1000 risk?

2 A No.

3 Q Do you have an opinion as to what level of
4 risk they might be able to detect?

5 A I think it requires a statistical answer. I
6 know it's not anywhere near 1 in 1000.

7 Q They certainly wouldn't detect a 1-in-100,000
8 risk?

9 A No. And they are not meant to.

10 Q I recognize that.

11 A Yeah, they are really meant as a yes/no
12 determination with respect to causation. You can try
13 to make them estimate risks but it wouldn't be in the
14 vicinity of 1 in 1000.

15 Q It would have to be greater than 1 in 1,000?

16 A You would be estimating, you would not be able
17 to prove it. You'd have to use models to estimate.

18 Q I understand. Has that been done?

19 A Sure.

20 Q With asbestos in brakes?

21 A Sure. Not in brakes but in asbestos in
22 general. You could do the math and figure out what it
23 meant to brake the dust.

24 Q Let's assume for purposes of our discussion
25 today that there is in fact a real 1-in-10,000 risk of

1 mesothelioma to mechanics that work with brakes who
2 file the edges, who sand the faces like Joe Mallia did,
3 who use compressed air to blow it out and who clean in
4 the manner that Joe Mallia did, would you agree that
5 that risk would not show up in these studies?

6 A These studies would not illustrate a
7 1-in-10,000 increased risk of, mesothelioma risk.

8 Q If we look back at the language used in
9 Exhibit 18, and I'm not attributing this as being the
10 statement being made in the paper but I like the way
11 they worded it, so... Would that be a risk that was
12 low, but non-trivial?

13 A That is something that thus far society has
14 kind of defined, and I'm calling regulatory agencies
15 society because they are supposed to represent societal
16 values. For workers it would be considered a trivial
17 risk, a 1-in-10,000 increased risk of mesothelioma.

18 Q It's a value judgment?

19 A It's the agency's view that that is considered
20 an insignificant occupational risk.

21 Q I understand what you're saying.

22 A It's a value judgment of our society at this
23 point.

24 Q Sure. But for your opinion in issuing a
25 reasonableness opinion, there exists a real but

1 unmeasurable possibility there is a risk to brake
2 mechanics of mesothelioma in the magnitude of 1 in
3 10,000?

4 A No, I wouldn't say that. Because first of all,
5 we laid no foundation for that opinion. I haven't said
6 anything like that. So far you've said make an
7 assumption about that. Remember, I haven't said it was
8 1 in 10,000.

9 Q No, I understand.

10 A Okay.

11 Q And I may have inartfully asked my last
12 question. And what I'm trying to say is it's possible
13 that there is a 1-in-10,000 risk of people amongst
14 brake mechanics who do what Joe Mallia did with brakes?

15 A I don't think so because I think the jury is
16 out with respect to whether chrysotile at any
17 reasonable dose can even cause the disease. You have
18 to go through the hurdle of the hazard identification
19 aspect which we haven't gotten through yet.

20 And then secondly, you're asking me to assume
21 that it does cause the disease and that in fact there
22 may be a 1-in-10,000 risk. I mean I can do it as a
23 hypothetical. Because it doesn't pass the first test I
24 don't have to worry about the mathematical model.

25 Q Well, let's take it step by step and see if we

1 can't tease it out. The studies that have been
2 performed regarding brake mechanics are insufficient to
3 defect a 1-in-10,000 risk or even a 1-in-1000 risk of
4 mesothelioma if one existed?

5 A That's correct.

6 Q Okay. What scientific evidence do we have
7 that such a risk does not exist?

8 A You've got the weight of evidence across many
9 studies that there is no increased risk of that disease
10 in this population of workers. And as I said, with all
11 the opportunities for confounding to push them to be
12 positive, we still see relative risks less than 1.

13 So all you can say is all the evidence would
14 suggest that what these people do is not increasing
15 their risk of mesothelioma.

16 Q Let's go back to that confounding possibility
17 in the questions we had earlier because I've been
18 thinking about that since that time. The unknown
19 exposure possibility of a confounder, would tend to
20 work towards the null?

21 A That's right. No, we tend to work toward above
22 the null. The null would be seeing no difference. If
23 there is confounders in this case, that is, the only
24 way it would be confounding the other way was where you
25 were going before, where as if you had population that

1 really weren't exposed to brake dust that were in the
2 cohort.

3 But it's more likely than not that these people
4 had exposure to asbestos or that they have forgotten or
5 haven't reported or weren't asked about in this epi
6 studies.

7 Q To the extent these individuals have
8 mesothelioma from exposures that they don't know of or
9 that they've forgotten or haven't reported, those
10 exposures would exist both in the population of
11 mechanics and nonmechanics?

12 A That can also happen.

13 Q Okay. And we have no reason to believe that
14 mechanics versus nonmechanics would have those recall
15 biases at different rates?

16 A That's probably why epidemiologists aren't
17 surprised at these results.

18 Q Okay. Now the weight of the evidence
19 regarding no increased risk comes back to the
20 epidemiology studies that are on Exhibit 15; is that
21 right?

22 A Oh, no, I mean Tate and Goodman talk about
23 reliance on 17 to 23 studies. I just happened to use
24 these because they tend to be the ones that most of the
25 epidemiologists think are the most solid.

1 Q Tate and Goodman's paper evaluates the quality
2 of most epidemiology studies?

3 A That's right.

4 Q Would you agree that they think the quality of
5 those studies is generally poor?

6 A Are you talking about the case control studies
7 or about all the studies?

8 Q I'm talking about the studies you just
9 referred to.

10 MR. LANKFORD: Vague and ambiguous.

11 MR. RUCKDESCHEL: I just asked if he would
12 agree.

13 MR. LANKFORD: Well, you're saying everything
14 that is not on Exhibit 15?

15 MR. RUCKDESCHEL: No, that's not what I'm
16 saying.

17 THE WITNESS: I understood the question.
18 Can I have the question read back, please?

19 (Record read.)

20 THE WITNESS: That wasn't what I took from this
21 paper.

22 BY MR. RUCKDESCHEL:

23 Q Okay.

24 A I did not get the impression that they thought
25 these six or seven case studies were poor.

1 Q Fair enough. If the rate of disease is low
2 but real as a result of exposure to a particular
3 substance, would you agree that epidemiological studies
4 will have difficulty detecting an increase in risk if
5 there is also a background rate of the disease?

6 A That's more difficult.

7 Q Okay. I saw in one of your papers from many
8 years ago a chart, death statistics from 1974. And I
9 was shocked to see that 16,700 and something people a
10 year in that time died from falls.

11 A It's an amazing thing, isn't it?

12 Q It's shocking.

13 A It is shocking.

14 Q That is the background rate for falls and
15 deaths in the United States.

16 A You know that's why we among other reasons we
17 use a threshold of 1 of 1000 in the workplace.

18 Q The fall risk?

19 A No, it's just the accidental death risk.

20 Q Okay.

21 A It's so high, if they try to minimize gasses
22 and vapors to lesser risk is caught in the noise.

23 Q Millions of people every year jump out of
24 planes with parachutes on?

25 A That's a big number. I doubt that.

1 Q Lots of people every year. Let's use
2 something nonquantitative. Lots of people skydive?

3 A Counsel, I thought you would wear me down
4 before time wore you down today.

5 Q Lots of people skydive?

6 A Yes.

7 Q Very few people die of skydiving?

8 A I don't know that. I know it's hard to get
9 insurance if you claim to be a skydiver on so they must
10 be losing some every year.

11 Q I'd like you to assume if we were to go to the
12 skydiving association and pull up the numbers, number
13 of jumps a year and number of deaths a year.

14 A Yeah, I think it must be low because former
15 President Bush did it. So I'll assume it must be quite
16 low.

17 Q That assumes rationality amongst our former
18 president, but I'll accept that.

19 If in fact lots of people skydive and very few
20 people die from skydiving, and there is a substantial
21 background rate of death from falls in the United
22 States, would you agree that the relative risk of a
23 death from skydiving is likely to be undetectable in an
24 epidemiological study?

25 A That would be true if they lumped them together

1 but I'm sure they not lumped together.

2 Q Okay.

3 A Falls from skydiving would be categorized
4 differently epidemiologically.

5 Q But if we categorized jumping out of a plane
6 and not having your parachute open as a fall, which it
7 certainly is, the risk of dying from a skydiving fall
8 would be undetectable --

9 MR. LANKFORD: Objection.

10 BY MR. RUCKDESCHEL:

11 Q -- given the background rate of death from
12 falls in the United States?

13 A If you didn't know the way, the situation
14 behind the falling death, the data wouldn't be
15 available for you to know. It's not that it's
16 statistically not significant. You just wouldn't know.

17 I know where you're going and unfortunately the
18 analogy is just a little bit short of what you want it
19 to be.

20 Q I'm not through with it. Let's fool around
21 with it a little.

22 A Okay, we can. If it works it would be very
23 good, but I don't think it's going to work for you.

24 Q I don't know. I'm trying to dumb it down
25 because that's what I do.

1 A It would be great for a jury if you can get it
2 to work but I don't think it's going to work.

3 MR. RUCKDESCHEL: Let's change the tape.

4 THE VIDEOGRAPHER: This ends Tape 3. Off the
5 record. The time is 4:51.

6 (Brief recess.)

7 THE VIDEOGRAPHER: We're on the record. The
8 time is 4:54.

9 BY MR. RUCKDESCHEL:

10 Q Dr. Paustenbach, let's talk a little more
11 about skydiving.

12 A Sure.

13 Q I'd like you to go ahead and assume that a
14 million people a year skydive?

15 A Okay.

16 Q And that 10 of the million have their
17 parachute not open and die from a fall?

18 A Okay.

19 Q That's a rate of one in 100,000?

20 A That's right.

21 Q And we can all agree that it may not be the
22 fall that killed them but it's certainly the sudden
23 stop at the end?

24 A I can agree with that.

25 MR. LANKFORD: Well, heart attack.

1 BY MR. RUCKDESCHEL:

2 Q We got to keep things simple here. We got
3 about 300,000,000 people in the United States now?

4 A I think that's about right.

5 Q Roughly 300,000,000. And if we assume that
6 15,000, to keep the numbers round, die from falls each
7 year, what would the rate be?

8 A It looks like about 1.5 in 30,000; is that
9 right?

10 Q Yeah. So that would be 1 in 20,000?

11 A 1 in 200,000. But that doesn't sound right.

12 Q I think its 20,000?

13 A You think it's 20,000. Let's say it's 1 in
14 20,000.

15 Q Okay. In that example, the rate of deaths
16 from skydiving is 1 in 100,000, and the rate of deaths
17 from falls, the background rate of deaths from falls in
18 the United States is 1 in 20,000, correct?

19 A Maybe I didn't follow you properly. Can you go
20 through the scenario one more time? There are 300,000
21 Americans?

22 Q 3,000,000,000 Americans.

23 A 3,000,000,000 Americans.

24 Q 15,000 die from falls each year?

25 A Okay.

1 Q A million people skydive.

2 A Each year.

3 Q Each year, 10 die, as a result.

4 A Okay.

5 Q So 1 in 100,000.

6 A Right.

7 Q So the rates are 1 in 100,000 in the example
8 for skydiving, 1 in 20,000 for the general population.

9 A Okay.

10 Q If one were to conduct a study, an
11 epidemiological study of skydivers to see if they were
12 at an increased risk of death from falling, in the
13 example that we've just have gone through would you
14 agree the study would be unlikely to come to the
15 conclusion that skydivers were at an increased risk of
16 dying from a fall?

17 MR. LANKFORD: Objection.

18 THE WITNESS: No, I wouldn't agree with that.
19 Because by the very nature of the study you just set up,
20 because you're looking at skydivers and death due to
21 skydiving, you'd have all your own data to make your own
22 inference.

23 I know what you're trying to do and I can't
24 make the example work the way you want it.

25 Q So let's do it as cohort study instead.

1 A Okay.

2 Q Let's look at people who died from falling.

3 A Okay. We're going to start with 300,000,000
4 Americans?

5 Q We have 300,000,000 Americans and we have
6 15,000 that die from falls. In that 15,000 we have the
7 10 that died from skydiving.

8 A 1 in 20,000 persons per year falling and dying,
9 right?

10 Q Right.

11 A Okay. And we have skydivers?

12 Q Right. We've got 15,000 deaths from falls,
13 14,990 in the United States are from falls other than
14 skydiving and 10 are from skydiving.

15 So if we were to do a cohort study that looked
16 at people that had the condition, death from a fall,
17 and we were to try and determine whether those
18 individuals had in a cohort study we come up with an
19 observable risk, and we're looking to see whether they
20 were undergoing the activity or not, correct?

21 A You could do that.

22 Q Okay. So would you agree that we would be
23 unlikely to find a higher observable risk for skydivers
24 than nonskydivers in that cohort study?

25 MR. LANKFORD: Objection.

1 THE WITNESS: Can I hear the question again?

2 (Record read.)

3 THE WITNESS: You couldn't say that because you
4 always know that they died from skydiving. That's the
5 problem with your example. Since you're introducing
6 that knowledge. If you said now we didn't know anything
7 about who the 10 people, then I could agree with you.
8 If we had no clue that they were there, but then you
9 wouldn't be able to answer any question about skydivers.

10 BY MR. RUCKDESCHEL:

11 Q I want you to assume, Doctor, we're doing a
12 study from a public health perspective whether we want
13 to outlaw skydiving. And so we take a look and say,
14 well, are people that skydive at a greater risk from
15 falls than people that don't. And then we take a
16 cohort of individuals that have died from falls and we
17 look to see how many skydived and how many of them
18 didn't. Is that how the study would be arranged?

19 A Probably, mm-hmm.

20 Q Would you agree that study would be unlikely
21 to find a statistically increased risk of death from a
22 fall amongst skydivers when compared to nonskydivers
23 given the rates of death from falls that we have here?

24 A Given the facts you're having me accept here?

25 MR. LANKFORD: Objection.

1 BY MR. RUCKDESCHEL:

2 Q Yes.

3 A If the rates turned out to be very similar,
4 let's say 1 in 20,000 you wouldn't be able to tell the
5 difference.

6 Q And if the rates were as in my example where
7 the rate of deaths from skydiving is below the
8 background rate it would be even more unlikely?

9 A It would be even more unlikely, that's right.

10 Q Okay. Look at how many pages we flip.

11 Would you agree that companies that
12 manufacture products have the primary responsibility
13 for the safety and health of the community that use
14 their products? With respect to use of the product?

15 A I think so.

16 Q Okay. Would you agree that suppliers of
17 products have a duty to notify customers of the
18 presence of a toxic component in their products?

19 A Only when the risk is considered worthy of
20 being shared with others.

21 Q Would you agree that one needs to perform an
22 analysis of the level of risk before one can make that
23 determination?

24 A If it's not intuitive that there is no risk.

25 Q Okay. Should companies when designing new

1 products consult with medical and industrial hygiene
2 professionals to make sure that hazardous materials
3 that are incorporated into those products don't pose a
4 safety risk?

5 A They ought to think about it. I don't know if
6 they have to talk to hygienists or occupational
7 physicians but people who are qualified to understand
8 the issue should be consulted.

9 Q In one of your papers, I'll figure out which
10 one it is. While I look I'll give you the setup of the
11 question. In one of your early papers, Doctor, you had
12 a chart that had four types of -- well, let me get it
13 before I do this. I've been so organized all day, and
14 now this.

15 Doctor, I'm going to mark as Exhibit 19 --

16 MR. BURKE: Excuse me, I don't know if it's my
17 phone or the connection but suddenly I could barely hear
18 you all.

19 MR. RUCKDESCHEL: I'll speak up.

20 MR. BURKE: It doesn't sound like it's you not
21 talking at the right level. I think there's a technical
22 thing.

23 MR. RUCKDESCHEL: It's not from us because
24 nobody has touched the phone. Is that better?

25 MR. BURKE: A little bit. I may get off and

1 just call back in to see if it's my line.

2 Q All right.

3 MR. BURKE: Thank you.

4 (Plaintiffs' Exhibit 19 was marked for
5 identification by the court reporter.)

6 BY MR. RUCKDESCHEL:

7 Q Dr. Paustenbach, I'd like to show you a copy
8 of a paper titled, "Analysis Techniques Help IEs
9 Evaluate Ethical Dimensions of On-The-Job Decisions."
10 Is this an article that you wrote?

11 A One of my first papers, yes.

12 Q And it was published in what journal?

13 A Industrial Engineering.

14 Q And that was in April of 1984, right?

15 A Yes.

16 Q I'd like you to turn to Page 70, which is the
17 third page. Can you tell me basically what this paper
18 was about? I know you may need to take a minute to
19 sort of refresh your recollection.

20 A Okay.

21 Q Can you tell us a little bit what this paper
22 was about, just sort of generally?

23 A Yes, a colleague and I chose to write this. I
24 was giving some lectures at the University of Virginia
25 with him, and we thought this would make for a good

1 case study in the business school. And this is in fact
2 what this is, this is a paper that evolved from a
3 business school case study. And we were trying to get
4 engineers and business men to think about risk issues
5 and safety issues.

6 Q And on Page 70 you list, you provide a table,
7 Table 1, Classification of Hazards. Can you tell me
8 what that table sort of sets forth?

9 A It sets forth the difference between product
10 hazards and workplace hazards, and those that result
11 from or those that produce acute injury versus chronic
12 injury. And the sources for those kinds of injuries.

13 Q In the text on the left-hand column towards
14 the bottom there is a section that says quote:

15 "Numerous examples of these types of
16 events have been recorded in the media
17 and could be classified according to this
18 scheme."

19 A Mm-hmm.

20 Q And that's the scheme of product versus
21 process, and acute versus chronic hazard?

22 A Right.

23 Q And then you provide four examples.

24 A That's right.

25 Q And the first example is death and injuries

1 resulting from automobile gas tank explosions?

2 A Right.

3 Q Were you referring to the Pinto?

4 A I didn't have one in mind at that time but my
5 colleague may have been thinking about the Pinto.

6 Q Okay. Was this something that your colleague
7 wrote?

8 A This table?

9 Q This section, do you recall?

10 A It was his idea to put them in a category so
11 they could be mathematically analyzed. Because this is
12 a decision analysis paper.

13 Q And your talking about the decision-making
14 process of industrial engineers?

15 A Yes.

16 Q And how that relates to ethics in the
17 workplace?

18 A Yes.

19 Q All right.

20 A I just don't recall if it was the Pinto or not.

21 Q General Motors had an exploding gas tank back
22 in the early '70s, too, didn't they?

23 A I don't know. That's not my area.

24 Q Have you looked at that issue from the
25 standpoint of determining whether General Motors and

1 Ford had as corporations reasonable decision-making
2 process with regard to hazards or potential hazards of
3 their products?

4 MR. LANKFORD: Objection.

5 A I never evaluated the gas tank issue.

6 BY MR. RUCKDESCHEL:

7 Q Okay. And the fourth example there for a
8 chronic process-related hazard is cancer from long-term
9 workplace exposure to asbestos?

10 A Yes.

11 Q It's been a long time since you read it?

12 A It's been almost 20 years.

13 Q Would you agree it's one thing to chose to
14 subject yourself to a risk, and another thing to
15 subject someone else to that risk?

16 A Sure.

17 Q For example, when you did your chromium
18 studies, you didn't just put chromium in the water
19 cooler at McLaren/Hart?

20 A That's right.

21 Q And would you agree that different people have
22 different risk tolerances?

23 A Yes.

24 Q I may choose to ride a motorcycle, somebody
25 else may decide that's too dangerous for them?

1 A Correct.

2 Q But that's a choice that the individual should
3 be allowed to make?

4 A Yes.

5 Q And would you agree that your view, Dr. Dennis
6 Paustenbach's view of what is a reasonable risk is at
7 the high end of our society's range of people's
8 different views of what might be a reasonable risk to
9 undertake?

10 MR. LANKFORD: Objection.

11 THE WITNESS: I think I would be on the high
12 end with respect to those things I know the most about
13 like chemical exposures, and I'm probably on the low end
14 with respect to safety exposures.

15 Q You drive a Porsche?

16 A Right, I do.

17 Q You drank hexavalent chromium?

18 A Right.

19 Q You took a bath in hexavalent chromium for
20 half a day?

21 A I mean are you applauding me because the
22 Porsche got such a good safety rating in a collision?
23 Because that's supporting my view that I am fearful of
24 acute incident and acute hazard risks, and the chemical
25 risks which I know a lot about I tend to be probably on

1 the higher end because I know quite a bit about them.

2 Q I understand.

3 A They are a whole different ball game of risk
4 because in the environmental chemical world we tend to
5 sometimes lose sleep over 1-in-10,000 and
6 1-in-1,000,000 risks where, we'll do other things like
7 ride bikes.

8 Q Without a helmet?

9 A Or even with a helmet. And people would be
10 startled that that's a pretty darn high risk compared
11 to the chemical risk.

12 Just to give an example, nobody thinks about
13 riding a bike as anything but healthy but it's very
14 high risk.

15 Q Riding a bike is a voluntary decision?

16 A Yes, sir.

17 Q The hazards of riding a bike, while maybe
18 underappreciated, are obvious.

19 A I don't know if they are very obvious but they
20 are certainly under appreciated.

21 Q Well, you could get hit by a car riding a
22 bike?

23 A I think if people saw the chart every morning
24 as to the risks in life they would change their
25 behavior. That's my guess.

1 Q Okay.

2 A If they were informed of the risks they would
3 change their behavior.

4 Q If there is a 1-in-10,000 risk of contacting
5 mesothelioma from exposure to brake dust, a real
6 hypothetically real 1-in-10,000 risk?

7 A For a lifetime mechanic.

8 Q For Joe Mallia, let's just assume there's a
9 real 1-in-10,000 risk. Would you agree that for Joe
10 Mallia that is a significant risk?

11 A I don't know why I would infer that.

12 Q Well, he's going to die.

13 A You're referring it has to do with the brake
14 exposure which would be an incorrect inference. If you
15 knew it was then I suppose we might have something to
16 talk about.

17 Q If there was a real 1-in-10,000 risk of Joe
18 Mallia getting --

19 A You have to have two assumptions then, Counsel,
20 one if it's a real 1-in-10,000 risk; and secondly his
21 disease is associated with exposure. You don't have
22 either one so it's probably not a good hypothetical for
23 me to answer.

24 Q If it's a real 1-in-10,000 risk for Joe Mallia
25 based on his work exposure, work history to develop

1 mesothelioma, should Joe Mallia have been given the
2 choice whether to work with asbestos or nonasbestos
3 brakes?

4 MR. LANKFORD: Objection.

5 THE WITNESS: I think what you're really asking
6 is if at the time he was working on brakes, society knew
7 there was a 1-in-10,000 lifetime increased risk, should
8 he have been told there was a 1-in-10,000 increased risk
9 so he could decide if he wanted to be involved with
10 brakes. Is that your question?

11 BY MR. RUCKDESCHEL:

12 Q It's not my question but I'll take that
13 question.

14 A Then and now, that level of risk in the
15 workplace is not one that we consider significant
16 enough to provide a quantitative estimate of the risk
17 to the worker for purposes of decision making. I'm not
18 weighing in on that. I'm just telling you the way
19 things are.

20 Q When Joe Mallia worked on his own personal
21 vehicles is that a workplace risk?

22 A I don't know how it's categorized.

23 Q How do you categorize it?

24 A I don't think I'd call it a workplace risk.

25 Q Going back to the things that I personally

1 think show that you may have a higher risk tolerance
2 than, for example, I do, you and your colleagues did
3 soak in a hot tub with chromium-laced water for half a
4 day?

5 A Yes.

6 Q And you participated in I believe one brake
7 replacement operation in July of 2002; is that correct?

8 A I think that's the right date.

9 Q All right. And that involved a '57 Chevy with
10 asbestos-containing brakes?

11 A Right.

12 Q And you blew out the drum?

13 A Yes.

14 Q And there was wear dust in the drum?

15 A Yes.

16 Q And the wear dust was measured, correct?

17 A Correct.

18 Q And you didn't wear any respiratory
19 protection?

20 A That is correct.

21 Q And you made that conscious decision?

22 A Yes.

23 Q Are there any other, I don't know how to put
24 this in any other way, are there any other experiments
25 that you have done on yourself that are analogous to

1 the chromium experiments but with other toxins?

2 A Well, you make it sound a bit ghoulish.

3 Q I know, and I apologize, but I don't know any
4 other way to put it.

5 A I have done other studies where there's been
6 resultant exposure but it would be no different than
7 what people do everyday. You know, we have literally
8 millions of Americans that go to work everyday and are
9 exposed to much higher chemical concentrations of
10 xenobiotics than I have exposed myself to in various
11 studies. I mean it's a fact of life. I mean if you
12 had a salad for lunch today you'd be exposed to quite a
13 number of carcinogens.

14 Q In fact I did. The other studies --

15 A I assume you weighed that risk. I mean I
16 actually have, I'm aware of my colleagues have done
17 studies of people that eat salads all day and then they
18 measure the dioxin-like materials that are naturally
19 occurring and they can see the difference in people
20 that are eating a lot of salads.

21 Q Regrettably like a second year med student I
22 have too much information about toxins for my own good.

23 A I did not participate in the salad study. I
24 did, as you know, conduct the Bakelite study where I
25 got exposed to asbestos fibers from the Bakelite.

1 Q Okay. Any other studies where you were
2 exposed to materials that are considered to be toxic at
3 various doses?

4 A I've been known to drink a glass of wine and
5 beer and...

6 Q Sure.

7 A The toxicity and theoretical risk are fairly
8 high with those.

9 Q Well, I understand and I see very little
10 benefit to Dennis Paustenbach of exposing Dennis
11 Paustenbach to asbestos dust from Bakelite. I see the
12 benefit of getting a glass of wine if you have a glass
13 of wine. So I'm concerned with the former examples.
14 I'm just asking you to list for me any other studies
15 you may have done where you may have knowingly exposed
16 yourself to toxins you may have been involved in with
17 your work.

18 A Well, I can't think of any right now.

19 Q Okay. You haven't done so with benzene or
20 with dioxin?

21 A Not where I've done a study where I tried to
22 evaluate exposure, no.

23 Q In other cases?

24 A No, that's what I'm saying, I can't think of a
25 scientific study where I got exposed to some agent.

1 Q I understand. So let me ask the question can
2 you think of unscientific studies where you've done it?

3 A Sure. I'm an antique collector so I used paint
4 stripper and expose myself. I have a stainless steel
5 bathroom sink and I use stainless steel cleaner on it
6 everyday and I know it contains five or six agents. I
7 clean my shower with Lysol which has incredibly
8 irritating components to it and I use it.

9 Yeah, I do it all the time. I fill my gas tank
10 and I get exposed to benzene every time I fill my gas
11 tank. And I guess get exposed to I guess about
12 al-in-100,000 risk when I fill my gas tank due to the
13 benzene and the leukemia risk. Yeah, I do it all the
14 time. You do, too, probably.

15 Q Let's confine to it your professional life,
16 though.

17 A Well, that isn't what you said.

18 Q No, I said unscientific. I mean apparently
19 the box opening study was unscientific but professional
20 experience. So let's stick with professional
21 experiences, any other studies where you have knowingly
22 exposed yourself to toxic materials that you were
23 studying.

24 A Again, you know, you can't make it less than
25 inflammatory so I don't have anything also to say.

1 Q Well, I know, but I need to know the answer to
2 the question if you've done it.

3 A Again, I've been as forthright as I can be. I
4 cannot think of another study that seems to fit in that
5 box.

6 Q Okay.

7 A I've done other studies but I don't think they
8 fit in that category.

9 Q Okay. Tell me what other studies you're
10 thinking of and what category they might fit into and
11 then I'll move on.

12 A Well, I did the diesel engine study with the
13 railroad, and I ended up wearing a respirator in that
14 study because I thought it was too irritating not to.

15 Q Okay. In your 2004 paper, the
16 state-of-the-art paper, there are a number of citations
17 throughout the paper to personal communications with
18 Arnie Anderson; is that correct?

19 A Yes. I don't look at the number but I
20 certainly cite them.

21 Q Okay. Did you take any notes in those
22 conversations?

23 A No.

24 Q Do you have any, anything other than the
25 finished paper itself that reflects those conversations

1 other than what might be locked in your mind?

2 A No.

3 Q Okay. Did you speak with other employees of
4 Ford, General Motors or Chrysler during the drafting of
5 those papers about the topics of those papers, the 2003
6 paper and the 2004 paper?

7 A I think I've said before that I talked to Bill
8 Krebs before I finished that paper.

9 Q Did you talk with Mr. Toth during the
10 authorship of those papers?

11 A I don't think I saw him during the authorship.
12 I don't recall if it was before or after the paper was
13 accepted or not. I don't remember. Obviously whatever
14 I talked to Paul about didn't have much impact on the
15 paper.

16 Q The propositions in the paper for which you
17 cite your conversations with Mr. Anderson as the source
18 of the information, do you have other authority for
19 those propositions or are you relying upon Mr. Anderson
20 for them?

21 A That's a good question and it's not been asked
22 before except outside a deposition. I do. And in
23 retrospect I probably should have just cited those.

24 Q It's important from a reader's perspective in
25 critically evaluating a paper.

1 A I have, and somebody called me on that actually
2 and asked did I have a citation that would back that up
3 other than personal communications. So I've already
4 thought about this and it's been raised to me
5 professionally.

6 Q It's an issue of transparency?

7 A I don't know if I'd use that term in this case.
8 Not so much transparency but ease of validation.

9 Q It's not easy to verify conversations you had
10 with Mr. Anderson?

11 A That's right.

12 Q On the other hand, I could go down to the
13 library and pull a paper you cite and see if I agree
14 with your citation in a paper?

15 A That's right.

16 Q In your professional life you have been
17 involved in at least two of what are in the public's
18 minds and perhaps the engineering profession's minds,
19 two of the largest environment disasters in our
20 country's history, Love Canal and Times Beach. Would
21 you agree?

22 A I've done risk work on both issues, that's
23 right.

24 Q And your conclusion in both was that there was
25 no increased risk to the individuals in those areas

1 from the contamination; is that correct?

2 A No.

3 Q Okay. Was there an increased risk to
4 individuals in the area of Love Canal, from the
5 contamination in Love Canal?

6 A That question is way too broad to answer. We'd
7 have to have a lot of time. A lot of time to deal with
8 that.

9 MR. LANKFORD: Objection.

10 THE WITNESS: I mean there's got to be a bunch
11 of objections to this one in. But nonetheless, let me
12 say this: On Love Canal there were portions of the
13 community that probably required remediation for sensory
14 reasons if nothing else. That is to say, there were
15 odors that needed to be dealt with. And then there was
16 also the aesthetic reasons associated with Love Canal.

17 And I think there were several reasons that
18 required actions be taken at that point that weren't
19 necessarily related to acute or chronic health risks.
20 And I think the historical record would support that.
21 So something needed to be done but I'm not so sure it
22 was due to acute or chronic health risk.

23 Q It might have just been because of stink?

24 A Well, and visuals. I mean the drums at times
25 in the spring would pop up. But that's a long

1 complicated story. You know, they weren't supposed to
2 develop the land in the first place.

3 Q What about for Times Beach?

4 A Times Beach is a complicated issue as well but
5 I'd have to say remediation had to occur at Times
6 Beach. The health risk thus far, the health risk, I
7 think most people think there are no direct or
8 attributable health risks to the exposures at Times
9 Beach. There is no evidence for that. What I can say
10 is there was dioxin and it elevated the blood levels of
11 some of the people in a small way, and the only case
12 report that I think still is unclear out of Times Beach
13 is one or two of the children, and I don't remember if
14 that was in Times Beach or at the horse arena.

15 Again, those two issues were addressed as a
16 result, ultimately were addressed I think due to the
17 difficulties of remediating with the community still in
18 place. It was just easier for the people to move out
19 until the towns were dealt with.

20 Q In this case you have evaluated at least
21 qualitatively Mr. Mallia's exposures to asbestos from
22 his work as a mechanic?

23 A Yes.

24 Q Would you agree that exposure, whatever it is,
25 the portion attributable to Chrysler is in your word

1 vanishingly small?

2 A You said Chrysler?

3 Q Chrysler.

4 A Yes.

5 Q Or zero?

6 A Vanishingly small or zero.

7 Q Okay. What about Caterpillar?

8 MR. LANKFORD: Same objection. Or objection.

9 Go ahead.

10 THE WITNESS: Do you want me to answer it?

11 MR. LANKFORD: If you can.

12 THE WITNESS: Can I have the question again?

13 BY MR. RUCKDESCHEL:

14 Q The question was what about Caterpillar?

15 A I'd like to hear a complete question.

16 Q Absolutely. I think that's fair. Mr. Mallia
17 work for Caterpillar equipment?

18 A Yes.

19 Q You've read his testimony in that regard?

20 A Yes.

21 Q That work involved working with disk brakes?

22 A That's what he said.

23 Q Okay. To the extent that Mr. Mallia's work
24 working with Caterpillar equipment was accurate, would
25 you agree the proportion of the dose of asbestos that

1 Mr. Mallia received as a result of working with brakes,
2 the proportion of Caterpillar exposure is vanishingly
3 small or zero?

4 MR. LANKFORD: Objection, are you talking about
5 occupational, nonoccupational, all?

6 BY MR. RUCKDESCHEL:

7 Q All.

8 A I wouldn't want to say on a percent basis
9 compared to let's say brake wear debris from Ford,
10 General Motors, if you're trying to say on a percent
11 basis which one of the four possible exposures was most
12 significant, I'm going to struggle with that, but I can
13 say the exposures were very, very small as a result of
14 working on Caterpillar equipment.

15 Q And when you say very, very small you mean in
16 comparison to whatever dose Mr. Mallia received, the
17 Caterpillar dose is a very, very small proportion?

18 A Well, they are all unimportant but I would say
19 if you had to say relatively on a mass basis of brake
20 wear debris for which there was potential exposure, I
21 would say Chrysler and Caterpillar were awfully small.

22 Q Okay. Mr. Mallia in his lifetime wasn't just
23 exposed to just brake wear debris, though? He was also
24 exposed to dust from the manipulation of new brakes?

25 A Yes, and I think he even mentions clutches as

1 well.

2 Q Right.

3 A And gaskets and that area.

4 Q I just want to make sure the record is clear
5 regarding, you say break wear debris often when you're
6 discussing dose and I want to make sure that when we're
7 talking about his lifetime dose, whatever it may be, it
8 involves dust from manipulation of handling and
9 manipulation of new brakes, brake wear debris, clutch
10 debris. Do you believe he was exposed to asbestos from
11 gaskets?

12 A If he was it would be very small.

13 Q Okay. And when you say very small do you mean
14 as a percentage of his total lifetime exposure from his
15 work as a mechanic?

16 A The sum total of exposure to asbestos and brake
17 wear debris as a result of working with brakes is very
18 small.

19 Q I understand what you're saying.

20 A Yes, and I think where you're going, and I'm
21 surprised you haven't drawn a pie chart, we can draw a
22 pie chart here if you wanted.

23 Q Sure.

24 A But let's just start by saying it's very small
25 Chrysler, it's very small Caterpillar and this would be

1 a complicated chart because it's got gaskets in it,
2 it's got clutches in it, it's got brake wear, and then
3 it's also got nonworn material. Do you really want to
4 do all that?

5 Q I have to do it. I have to do it. You
6 brought it up. I have to do it. So we'll mark this as
7 Exhibit 20.

8 (Plaintiffs' Exhibit 20 was marked for
9 identification by the court reporter.)

10 BY MR. RUCKDESCHEL:

11 Q And let's just do a little pie chart
12 qualitatively.

13 A Do you want me to take control of this or do
14 you want to ask me a question?

15 Q I'd like you to draw a pie chart that
16 qualitatively represents as a whole Mr. Mallia's
17 lifetime dose of asbestos from working as a mechanic as
18 described in his depositions.

19 And then I'd like you to divide that pie chart
20 up qualitatively to show the proportion represented by
21 work with gaskets, work with Chrysler and work with
22 Caterpillar. And let's call it Daimler Chrysler so you
23 can use a D on that little pie, that little piece.

24 MR. LANKFORD: And you want him to factor as to
25 all other or do you want him to break down every single

1 manufacturer.

2 MR. BURKE: Let me object to the form of the
3 question. I don't think you can draw a pie chart that
4 represents a qualitative difference.

5 MR. RUCKDESCHEL: Okay.

6 MR. BURKE: Because if by chance --

7 MR. RUCKDESCHEL: Your objection is noted.

8 MR. LANKFORD: While he's doing that can you
9 pose the question again, restate it? I'm not sure I
10 know what you're asking.

11 BY MR. RUCKDESCHEL:

12 Q I was asking him to draw a pie chart, the
13 whole of which would represent Mr. Mallia's lifetime
14 dose of asbestos from his lifetime as a mechanic and
15 then to draw in there the pieces of the pie that he
16 would attribute to Chrysler, Caterpillar and gasket
17 work.

18 A I think this is pretty much the spirit of where
19 I was going.

20 Q Explain this to me, sir, what is represented
21 there?

22 A In the first pie chart if you will, which is
23 without pieces of the pie, these are the sources of,
24 possible sources of asbestos in air as a mechanic.

25 The other one is possible suppliers of parts.

1 MR. LANKFORD: Well, let me object to the
2 question. Dr. Paustenbach hasn't been asked to break
3 down I guess the friction exposures by all possible
4 contributors or I should say the automotive by all
5 possible contributors, and I'm not sure he's been given
6 the material to do so.

7 MR. RUCKDESCHEL: It's objection, form, under
8 Florida law, as Mr. Burke will be happy to point out to
9 you.

10 MR. LANKFORD: And that as well.

11 BY MR. RUCKDESCHEL:

12 Q Thank you for doing that, Doctor. It's not
13 what I was looking for but we're not going to redo it.

14 I asked you earlier, Doctor, if you had a
15 thorough work history of or careful I think was the way
16 I phrased it, a careful work history of a brake
17 mechanic who developed asbestosis whether you would
18 need an epidemiological study showing a relative risk
19 of over 2 to attribute that worker's asbestosis to his
20 work as a brake mechanic. Do you remember that
21 questioning?

22 A Yes.

23 Q I'd like to ask you the same question with
24 regard to mesothelioma.

25 A It's a different answer.

1 Q What is the answer?

2 A I don't have any evidence that would link his
3 work as a brake mechanic to mesothelioma. You can
4 envision under some bizarre situation where he would
5 get huge doses of dust and possibly get asbestosis, but
6 I wouldn't have any evidence to suggest that it would
7 cause mesothelioma.

8 Q Would you agree that the exposure levels of
9 both a peak and time-weighted average for mechanics who
10 work with truck brakes are higher than the exposure
11 levels of mechanics that work with car brakes?

12 A It depends on the time frame, but generally if
13 you were going to look back to the 1970s and '80s I'd
14 say that's true.

15 Q And part of that is because truck brakes are a
16 lot bigger than car brakes?

17 A No.

18 Q What is it due to?

19 A It's due to the way you interact and handle --
20 the whole way you do a brake job on a truck is
21 significantly different. I've been through this line
22 of questioning before about the size of a Caterpillar
23 brake lining versus a truck versus a car. That's not
24 the driving factor. It's other things.

25 Q Tell me what those other things are.

1 A It has to do with whether you have rivets or
2 not, whether you have to remove the residual lining and
3 buff the metal plate underlining it. It has to do with
4 whether you have to cut from a sheet to make the brake
5 for the truck. And drilling. I think I already
6 mentioned drilling. It depends on that and on
7 engineering controls.

8 That's why I say it's very time dependent and
9 you can't generalize. Sometimes the brake comes to you
10 already bonded, and other times it doesn't so...

11 Q What types of truck brakes did Joe Mallia use,
12 bonded or did he rivet them himself?

13 A I don't recall from the testimony.

14 Q If we assume that he used bonded brakes?

15 A My recollection is I would expect for the
16 trucks he looked at they were bonded.

17 Q Let's just go ahead and make that assumption,
18 that he used bonded brakes?

19 A Mm-hmm.

20 Q Would you agree that Mr. Mallia's beveling of
21 the truck brake would cause a larger release of dust
22 than his beveling of a car brake?

23 A We'd have to go back and look at the testimony.
24 I'm not so sure he said he beveled truck brakes.

25 Q I'd like you to assume for purposes of our

1 assumption that Mr. Mallia beveled truck brakes and a
2 car brakes in a similar fashion. Would you agree that
3 the beveling of the truck brakes would release a larger
4 quantity of dust than beveling of the car brakes?

5 MR. LANKFORD: Objection as to form.

6 THE WITNESS: Perhaps on a per-car basis. On a
7 lifetime basis I would expect if he did what he said he
8 did, the cars would contribute more to the dust.

9 BY MR. RUCKDESCHEL:

10 Q If we look at one truck brake beveling, one
11 shoe?

12 A And you want me to assume he beveled the same
13 way and he beveled more mass off the truck, right? By
14 definition you'd expect there'd be more dust.

15 Q Well, and that's what it is. The truck brakes
16 are bigger and if you file them the same way that you
17 file a car brake you're going to have to file off more
18 material?

19 A I believe it's probably not credible that he
20 filed and beveled truck brakes.

21 Q If Mr. Mallia testifies that he did so, it's
22 your opinion that his testimony is not credible?

23 A It would be an unusual practice. He may have
24 done it, certainly. I have no reason to question what
25 he's testifying to. But it would be unusual and I

1 would be surprised if anybody ever taught him to do
2 that.

3 Q Why would it be different for trucks than for
4 cars?

5 A Because you're trying to minimize the squeak,
6 and normally this is not a big factor on trucks. It's
7 not the same issue.

8 Q Did Mr. Mallia have formal training in auto
9 mechanics?

10 A I didn't read about it.

11 Q Did he have formal training in truck
12 mechanics?

13 A I didn't read about that either.

14 MR. RUCKDESCHEL: Let's take five. I think
15 we're almost done.

16 THE VIDEOGRAPHER: Off the record. The time is
17 5:45.

18 (Brief recess.)

19 THE VIDEOGRAPHER: Back on the record. The
20 time is 5:55.

21 BY MR. RUCKDESCHEL:

22 Q Doctor, you are familiar with Dr. Langer's
23 case report regarding mesothelioma and brake mechanics?

24 A Yes, sir.

25 Q In that case report Dr. Langer found only

1 chrysotile tissue in the mechanic's lungs; is that
2 correct.

3 A That's what he reported. As I recall. We
4 should probably take a look at that if we're going to
5 talk much about it.

6 Q Sure. Let's go ahead and assume that that's
7 what Dr. Langer reported in that study, that case
8 report.

9 A Sure.

10 Q If that's the case, is it your opinion that
11 that mechanic's mesothelioma is idiopathic?

12 A No. There's too many assumptions in that.

13 MR. LANKFORD: Objection to the form.

14 BY MR. RUCKDESCHEL:

15 Q Okay. Let's get the paper.

16 A I promised your colleague that the hardest
17 questions would be around the bend.

18 Q This is not a hard question.

19 A They're coming. Okay. Is this the one you're
20 referring to?

21 Q No, 92.

22 A It's actually a letter to the editor. Do you
23 have with it with you?

24 Q I don't have a hard copy of it.

25 A I can answer questions about it. My memory is

1 fairly good on this.

2 Q Okay, all right.

3 A But the reason I can't answer it the way you
4 presented it, he had analytical chemistry issues he was
5 concerned with with respect to being able to identify
6 the amphiboles.

7 Q Okay. Let's take a hypothetical brake
8 mechanic.

9 A Okay.

10 Q You have a brake mechanic that performed brake
11 repair operations in the method and manner that Joe
12 Mallia did. I'd like you to assume so. That they did
13 so for the period of 1978 to '83, five years, the
14 nature and frequency that Joe Mallia did.

15 I'd like you to assume that that individual
16 contracts malignant mesothelioma and that they are a
17 47-year-old male. I'd like you to assume that that
18 individual dies as a result of their malignant
19 mesothelioma, and that pathological examination of
20 their lung tissue by a competent pathologist determines
21 that there is a three times background level of
22 chrysotile in the hypothetical individual's lungs and
23 that there are no detected amphiboles in the lung
24 tissue. Are you with me on the hypothetical?

25 A Yes, sir.

1 Q Is that hypothetical brake mechanic's
2 mesothelioma attributable to his exposure to asbestos
3 from working with brakes?

4 MR. LANKFORD: Objection as to form and calling
5 for a medical opinion. Beyond this expert's expertise.

6 THE WITNESS: Could you read the last sentence
7 only of the question?

8 (Record read.)

9 THE WITNESS: I would say that would be
10 insufficient evidence to make that attribution.

11 BY MR. RUCKDESCHEL:

12 Q Why?

13 A Because as I've said the, if the chrysotile can
14 increase the mesothelioma risk, I expect it's either
15 due to dose or fiber length. You would have to have
16 quite a number of cases with an understanding, of
17 similar people like you just described, with an
18 understanding of fiber length, before I would conclude
19 that it was more likely than not to be due to those
20 exposures given what we know today.

21 Q Okay. Let's start with the second part of
22 your statement first. Similar individuals. Has there
23 been an any study that you know of that has attempted
24 to collect cases of individuals similar to Joe Mallia
25 and Joe Mallia's work procedures, and to evaluate their

1 exposures to asbestos in a systematic fashion?

2 A I think the inferences from the various studies
3 I summarize in my paper should not be much different
4 from Joe Mallia.

5 Q Those inferences relate to groups of
6 individuals who all will have different work practices?

7 A That's right.

8 Q And there has been no study of individuals
9 with work practices specifically like Joe who filed,
10 blew out, cleaned up in the way he did and worked with
11 cars and trucks?

12 A Oh, you'd be I think incorrect about that. As
13 I said, before, I have no problem using that historical
14 database to predict the risk to Mr. Mallia because
15 those studies were conducted in earlier years when the
16 exposures were higher, when grinding or occurred and
17 blow-out was prevalent. And there was no warnings. I
18 mean you got warnings in his era as well.

19 So the fact that he's got warnings and you're
20 comparing him against a cohort that was more exposed is
21 why I can believe that there is no relationship between
22 his disease and his work as a brake mechanic.

23 Q Which of the studies in your 2003 paper
24 occurred during times when there was substantial
25 grinding in your opinion?

1 MR. GIRTMAN: This Ben Girtman. I'm going to
2 register an objection to this whole line of questioning.
3 There is no indication that Dr. Paustenbach can benefit
4 of Stanley Gibson's eight years of taking over his work.

5 MR. RUCKDESCHEL: Ben, it's objection, form.

6 MR. GIRTMAN: I've stated my objection.

7 MR. RUCKDESCHEL: Please don't make speaking
8 objections.

9 BY MR. RUCKDESCHEL:

10 Q Do you have the 2003 paper, Doctor?

11 A I do but I'll have to hear the question again.

12 Q Absolutely.

13 A I'd like to hear it from the court reporter.

14 (Record read.)

15 (Discussion off the record.)

16 THE VIDEOGRAPHER: Back on the record. The
17 time is 6:12.

18 THE WITNESS: Okay, Counsel, what I had asked
19 is for the last sentence to be read back and I'll answer
20 your question.

21 (Record read.)

22 THE WITNESS: I don't think during the time
23 that these studies were conducted I would categorize it
24 as substantial grinding. But I will state the three
25 times, the three papers where they say grinding

1 occurred.

2 BY MR. RUCKDESCHEL:

3 Q Okay.

4 A I don't want to characterize it as a time of
5 substantial grinding.

6 Q I didn't think you did.

7 A The best evidence for supporting my argument is
8 really the time frame of when the epidemiology data
9 were collected and analyzed. That is to say, those
10 people in those studies were generally working in
11 the '50s, '60s and '70s. And that is certainly the
12 time when grinding would have been more common. But
13 I'll just say for the purposes of answering your
14 question for the 2003 paper.

15 R~delsperger et al., in '86 mentions that his
16 mechanics are involved in grinding and turning of brake
17 linings as well as blowing out of brakes. Johnson,
18 Zumwald and Roberts in their January 29th, 1979 report
19 mention that they were looking at service operators at
20 least in Facility G and maybe others that involved pad
21 grinding, riveting and punching. It was a truck
22 facility. And I expect, although I haven't looked at
23 it more carefully, I think there is going to be other
24 grinding occurring there.

25 And then in Johnson '76 which is the one I

1 expected to have the most grinding, it's again Facility
2 G which I think is actually almost the same report. So
3 not a lot of grinding that I can document during this
4 time period.

5 Q Was there grinding occurring -- I'm sorry,
6 this is the wrong questions. Let me start out with,
7 which of the time-weighted average samples that form
8 part of the basis of your average time-weighted average
9 in your 2003 paper involve grinding?

10 A You can't tell because the descriptions of
11 these workers is such that I have to infer it's part of
12 their daily practice, even though I know during this
13 time period grinding was decreasing. As you know from
14 the discussion I mentioned this. I can't tell you
15 which employees when sampled with involved in grinding
16 and which were not.

17 Q How many of the time-weighted average samples
18 included in the time-weighted average samples that
19 formed your average occurred during a time when there
20 was substantial grinding?

21 A Well, I don't want to say substantial grinding.
22 I just want to say during the era collected --

23 Q Okay.

24 A -- there was grinding occurring. I'm not going
25 to say it was substantial during that era.

1 Q Do any of the reports from which you garner
2 the time-weighted average samples that form part of
3 your average in the 2003 paper specifically mention
4 grinding occurring?

5 A The facilities for which you have data,
6 specifically mention grinding occurring. But you that
7 would be all you'd get.

8 Q Is there any mention of grinding occurring on
9 the day that the sample was taken that forms the
10 time-weighted average?

11 A That's an excellent question.

12 Q It's late in the day.

13 A Which I haven't heard before. Your questions
14 are supposed to get worse at the end of the day, not to
15 be so insightful.

16 MR. LANKFORD: This doesn't have to be on the
17 record but what was your question?

18 BY MR. RUCKDESCHEL:

19 Q The question is which of the time-weighted
20 average samples that form part of the basis of the
21 time-weighted average conclusions of the 2003 paper,
22 mention that grinding occurred when the sample was
23 taken? I think that's a question.

24 A At least the NIOSH studies don't give that much
25 detail as to relate the days when grinding or which

1 persons did grinding that day versus those that don't.
2 R~delsperger tells us on Table 4 on Page 67 that he's
3 got five people that he studied grinding by hand and
4 ten doing machine grinding. And he has some specific
5 data for that. But it's on a rate basis.

6 Q And it's not part of the time-weighted
7 average?

8 A Well, I don't know. But he certainly has
9 short-term samples that reflect that.

10 Q Would you agree there's not enough information
11 from R~delsperger's paper to determine whether those
12 activities became part of the time-weighted average
13 that he reports?

14 A That's what I recall.

15 Q And for the NIOSH studies, while there is
16 mention of grinding at various points in various NIOSH
17 studies, there is insufficient information in those
18 studies to determine whether any grinding occurred
19 during any of the time-weighted average samples
20 reported?

21 A I wouldn't say that. I think it's pretty
22 clear. I talked to them, also. They knew that
23 grinding occurred on days they sampled but they didn't
24 identify them on this.

25 Q Is there any way for you to identify which

1 samples had grinding and which did not?

2 A I don't think I can from the report.

3 Q And you don't have any other information
4 available?

5 A No, I only know what is in the report and the
6 one discussion I had.

7 Q And the one discussion you had with who?

8 A Sheehan.

9 Q And that's S-H-E-E-H --

10 A Actually I think it was actually Zumwald?

11 Q Zumwald?

12 A It may have been Zumwald. I'm trying to
13 remember.

14 Q Z-U-M-W-A-L-D.

15 A It was one of those days when I called to ask
16 for one of the three and I got one. So I'm not sure
17 they are all there.

18 Q Let me ask you the Arnie Anderson question.
19 Do you have any notes?

20 A No.

21 Q Do you have anything that will allow an
22 individual in my position to go and validate whether
23 grinding occurred during those time-weighted average
24 samples?

25 A No. You're prompting me to get a letter from

1 them if they can help me out on this.

2 Q That may be.

3 A No, I don't. At the time it didn't strike me
4 that that was needed.

5 Q Would the same answer be true with regard to
6 beveling, the same thing be true with regard to
7 beveling? There's not enough information?

8 A Let me be clear. It was either Johnson,
9 Zumwald or Roberts, and I think it was Roberts because
10 he had the same name as I have. That's why I would
11 remember it.

12 Q We just went through this exercise for
13 grinding. Would you agree there is no information in
14 these studies to show that any beveling occurred the
15 time-weighted average samples that forms the basis of
16 your average --

17 Let me start over. Would you agree,
18 Dr. Paustenbach, that in the studies that collect the
19 time-weighted averages that form the basis of the
20 average that you conclude in your 2003 paper, there is
21 insufficient information to determine whether any
22 beveling occurred during the collection of the
23 time-weighted average samples?

24 A I can't specifically say which samples were
25 collected on a time-weighted average basis that

1 included beveling or grinding. At least I don't recall
2 that I can identify those. Maybe with further
3 searching I can do that. Right now I don't know that I
4 can.

5 And I can't say that I'm confident based on the
6 reports and my discussion with them that it's
7 incorporated because they mention that that's what's
8 occurring in these facilities. But I don't think I can
9 demonstrate that that very sample or a specific sample
10 included grinding or beveling.

11 Q And of those reports where there is mention of
12 grinding or beveling occurring, would you agree that
13 there are less than 10 time-weighted average samples?

14 A No, I can't say because they have, NIOSH has
15 always characterized this as a typical workday that
16 they sample which may have included grinding and
17 beveling as part of the daily practice. But I can't
18 answer your question specifically.

19 Q But isn't it your belief, Dr. Paustenbach,
20 that in the 1970s when most of these samples were
21 collected, grinding and beveling was an infrequent
22 activity?

23 A Yes, that's why I've always said I'm surprised
24 at Mr. Mallia's report because people aren't doing much
25 of it at that time in history.

1 Q Okay. But with regard to Mr. Mallia's dose,
2 to the extent that we don't know whether grinding or
3 beveling was occurring during the collection of the
4 time-weighted average samples that form the basis for
5 your average, then our ability to analogize your
6 average to the does Mr. Mallia received when he did his
7 work is limited?

8 A It's only limited if you assume at the
9 beginning of your statement was accurate, which is we
10 don't know that grinding or beveling was occurring
11 during the collection of these samples. That's not
12 true. What is true is I can't tell you which samples
13 involved, during that day, grinding and beveling. All
14 I know is the author's report that it's occurring. I
15 think it would be extremely unlikely that NIOSH said
16 these things were occurring and then never sampled
17 them.

18 Q I understand what you're saying.

19 A Okay. I know you didn't mean to
20 mischaracterize what I said.

21 Q I certainly wasn't. And I think I'm on the
22 same page as you now. And my point is you come up with
23 an average of some average samples?

24 A Yes.

25 Q And Mr. Mallia doesn't have an average

1 exposure. Mr. Mallia has his exposure?

2 A That's true.

3 Q Okay. And, for example, the average household
4 income in the United States might be \$50,000 for a
5 family of four but some people make an awful lot more
6 and some people make an awful lot less?

7 A That's right.

8 (Plaintiffs' Exhibit 21 was marked for
9 identification by the court reporter.)

10 BY MR. RUCKDESCHEL:

11 Q Doctor, I'd like to show you what has been
12 marked as Plaintiffs' Exhibit 21 that was produced
13 minute ago. It appears to be a list of testimony going
14 back to 2001; is that correct?

15 A Yes, sir.

16 Q If I combine that with Plaintiffs' Exhibit 11
17 which is a list of testimony that appears to run from
18 1990 to 2003, should I have a complete record of your
19 testimony since 1990?

20 A It would appear that way.

21 MR. RUCKDESCHEL: Great. I'd like to show you
22 what's been marked as Exhibit 22, some additional
23 documents that were produce a minute ago.

24 (Plaintiffs' Exhibit 22 was marked for
25 identification by the court reporter.)

1 BY MR. RUCKDESCHEL:

2 Q Can you tell me what each these additional
3 documents is, and let's just take Page 1, Page 2 and to
4 the extent they are different documents tell me what
5 they are?

6 A Maybe I should number this exhibit.

7 Q Great idea.

8 A Okay. These exhibits have been numbered by
9 page. On the first page there's an abstract labeled
10 No. 410 which is from the annual meeting of the Society
11 of Toxicology. The title of the paper is "Chrysotile
12 Asbestos Exposure Associated With Removal of Automobile
13 Exhaust Systems (Circa 1946 to 1970)." So that was a
14 paper that was delivered or a poster that was presented
15 at the Society of Toxicology meeting. And I was one of
16 the authors.

17 On the next page there is an abstract titled,
18 "T6.2 Cumulative Occupational Asbestos Exposures of Us
19 Brake Repair Mechanics," and like I say, that was
20 presented at the Society For Risk Analysis in the fall
21 of 2004. I believe it was in December 2004.

22 Also at that meeting was presented Abstract No.
23 T6.3, "Evaluating Exposures Associated With Vehicle
24 Brake Cleaning and Machining Activities Using Short
25 Term and TWA Measurements."

1 On Page 5 there is an abstract No. W2D-01
2 titled "Short-Term Asbestos Exposures Associated With
3 Vehicle Brake Cleaning and Machining Activities From
4 1970 to 1990." And that's from the 14th Annual
5 Conference of the International Society of Exposure
6 Analysis.

7 On Page 6, from the same conference, Abstract
8 W2D-03, which was titled, "Chrysotile Asbestos Exposure
9 Associated With Removal of Automobile Exhaust Systems
10 (Circa 1950 to 1974): Preliminary Findings of a
11 Simulation Study."

12 On Page 9, Abstract T14.6 titled,
13 "Environmental and Occupational Health Hazards
14 Associated With the Presence of Asbestos in Brake
15 Linings and Pads (1900 to the Present)," and that is
16 from the Annual Meeting of the Society For Risk
17 Analysis which was held in December 2003.

18 On Page 14, from the Society For Risk Analysis
19 meeting in December 2003, Abstract T23.3 entitled, "An
20 Evaluation of Historical Exposures of Mechanics to
21 Asbestos From Brake Repair."

22 And that's what is in this exhibit.

23 Q Doctor, on Page 1 of the exhibit there is
24 reference to chrysotile asbestos exposure associated
25 with removal of automobile exhaust systems. Can you

1 tell me who financed the work that went into that?

2 A I think it was jointly funded by Ford, General
3 Motors and Chrysler.

4 Q And "Cumulative Occupational Exposures of U.S.
5 Brake Repair Mechanics," that's on Page 2, who financed
6 that?

7 A I believe it was Ford, General Motors and
8 Chrysler.

9 Q On Page 3, "Evaluating Asbestos Exposures
10 Associated With Vehicle Brake Cleaning and Machining
11 Activities Using Short-Term and TWA Measurements," who
12 financed that work?

13 A Well, let me be clear. I'm not sure that any
14 of these papers, when you say financed that work, the
15 original research was probably funded by them. There
16 may have been no funding to do the work to present at
17 this meeting or to attend the meeting or even to
18 prepare the presentation material.

19 So let me be clear. I don't know if any of
20 these was funded by them, any of the presentations at
21 these conferences. But the original work would have
22 been funded by them.

23 Q That's what I'm referring to. The work your
24 firm undertook to prepare the data that went into these
25 presentations and papers.

1 A I just want to make it clear if there is a
2 hundred thousand dollars in work and expenses that went
3 into presenting these papers, it's possible there was
4 no funding for that.

5 Q And it's possible there was some?

6 A And it's possible there was same.

7 Q Okay.

8 A And the answer is the same for all the
9 abstracts.

10 Q All the abstracts and all the things in
11 Exhibit 22?

12 A Yes, sir.

13 (Plaintiffs' Exhibit 23 was marked for
14 identification by the court reporter.)

15 (Plaintiffs' Exhibit 24 was marked for
16 identification by the court reporter.)

17 BY MR. RUCKDESCHEL:

18 Q Okay, great. Exhibit 24 appears to be a
19 PowerPoint presentation?

20 A Yes.

21 Q Can we match it up with the abstract?

22 A It's from the Society For Risk Analysis, 2004.

23 Q Okay.

24 A And you could match it up from the abstracts.

25 (Plaintiffs' Exhibit 25 was marked for

1 identification by the court reporter.)

2 BY MR. RUCKDESCHEL:

3 Q If I take the other two, Exhibit 25 and 26
4 will I be able to match those up as well?

5 A You shouldn't have any problem with that.

6 (Plaintiffs' Exhibit 26 was marked for
7 identification by the court reporter.)

8 BY MR. RUCKDESCHEL:

9 Q Same for 23?

10 A That's right.

11 Q Going all the way back to the hypothetical, we
12 started talking about Dr. Langer's case report and
13 because there may have been chemistry issues we went to
14 the hypothetical.

15 You said in your answer to that hypothetical
16 question that there would have to be quite a number of
17 cases like that before you could attribute the work as
18 a mechanic to causation of mesothelioma. How many?

19 MR. LANKFORD: Objection to form, misstates
20 testimony.

21 MR. RUCKDESCHEL: Okay. How did I misstate his
22 testimony?

23 MR. LANKFORD: Well, can I have the question
24 read back?

25 (Record read.)

1 MR. RUCKDESCHEL: Counsel, how did I misstate
2 the testimony? Since you accuse me of misstating the
3 testimony.

4 MR. LANKFORD: My recollection of the record is
5 that's not what he stated.

6 MR. RUCKDESCHEL: I'd like you to explain how
7 you believe I misstated because you made a
8 representation on the record that I misstated
9 Dr. Paustenbach's testimony.

10 MR. LANKFORD: And my recollection of his
11 testimony was that it didn't match up with that. I
12 don't think that's what he stated. If we want to read
13 it back and I think the subtleties may be significant,
14 potentially. If you want to find the exact response we
15 can go ahead and have the court reporter read it.

16 BY MR. RUCKDESCHEL:

17 Q Dr. Paustenbach, was my phrasing of that
18 question sufficiently accurate?

19 A I don't have any problem answering your
20 question.

21 Q Would you answer my question, please?

22 A I'll have to have it heard back.

23 Q Absolutely.

24 A When he heard it I thought I could answer it.

25 Q When we were discussing the hypothetical --

1 A I'm not disagreeing, by the way, with
2 Mr. Lankford. I'm just saying I can answer the
3 question.

4 Q I understand. I'm not asking you to be mom in
5 this and decide who is right. When we were discussing
6 the hypothetical --

7 A Oh, you're going to give me a new question?

8 Q Yes. We talked about the individual that
9 worked as a mechanic, hypothetical individual that
10 contracted mesothelioma, there was chrysotile asbestos
11 found in his lungs by a competent pathologist?

12 A It was three times background.

13 Q Three times background.

14 A Only chrysotile.

15 Q Only chrysotile, no amphiboles. And I asked
16 you whether you could attribute the mesothelioma in
17 that hypothetical individual to his work as a mechanic
18 and you said you could not.

19 And the in part of that answer of explaining
20 why you could not you indicated there would have to be
21 a number of cases like that before you could make such
22 an attribution. Is that an accurate summary of your,
23 that section of your answer?

24 A I think there was another piece to it.

25 Q The other piece related to similar

1 individuals. And we talked about that. We digressed
2 into which studies.

3 A Let's cut to the chase.

4 Q Yeah. How many?

5 A I don't know how many it would take because I
6 think it's an issue of statistical power as well as
7 medical inference. So I really can't answer that
8 today.

9 I would tell you this, you would want to not
10 only have the lung data, you would want to have
11 bullet-proof exposure histories. But at some point, at
12 some point you would probably say the data were
13 convincing. I don't know how many it would take.

14 Q We don't make decisions in society and even as
15 a medical community regarding causation only when we
16 have bullet-proof data?

17 A No. But in this case because of the huge,
18 relatively huge number of studies on this issue, the
19 weight of evidence that it would take to overcome that
20 evidence would have to be appreciable.

21 Q You would agree there is a difference of
22 opinion amongst experts in these cases regarding
23 whether that is the appropriate view?

24 A I will say that you can have opinions that
25 aren't well founded and there certainly are a number of

1 people that have opinions that I believe aren't well
2 founded.

3 Q And that would be people on my side of the
4 table?

5 A That's yet to be seen. We haven't been to
6 court yet.

7 Q All right. Now talking about small businesses
8 versus large corporations would you agree that a small
9 business the size Imbergia Paving would be unlikely to
10 have industrial hygienists on staff?

11 A I think that's true.

12 Q And they would be largely dependent on
13 information provided to them by their material
14 suppliers for information regarding potential hazards
15 of those materials?

16 A Either the material supplier in one form or
17 another, in this case you'd either have the brake box
18 or you'd have the service manual.

19 Q Okay. With regard to your 2003 paper --

20 A And by the way, at this time frame he should
21 have had exposure to both. He should have had warnings
22 both the through brakes and service manuals.

23 Q If you bought the vehicles used would you have
24 to ask the manufacturer for the service manual if the
25 person you bought it from did not have it?

1 A No, because, you know, Chilton's, for instance,
2 has even warnings at this time. So I guess the only
3 way he wouldn't know is if he tried to do all these
4 repairs without any instruction whatsoever.

5 Q Do you recall what Mr. Mallia said regarding
6 reference to manuals when performing the mechanic work
7 that he performed?

8 A My recollection was it was infrequent.

9 Q In the 2003 paper, Doctor, how many times, if
10 you recall, was it submitted to the journal that
11 actually published it before it was accepted in final
12 form?

13 A That I can't answer.

14 Q How about the for the 2004 paper?

15 A I can answer.

16 Q I saw on the ChemRisk website there are a
17 number of papers that have not yet been --

18 A Maybe I should answer.

19 Q Oh, I'm sorry. I apologize. It's late. You
20 can answer. I appreciate that. Thank you, Doctor.

21 A Let's go back and do it for both of them
22 actually.

23 Q Okay, let's start the question. Can you tell
24 me how many times the 2004 paper was submitted?

25 A We can even go to the 2003.

1 Q Okay, 2003.

2 A I think, I'm almost certain the 2003 paper was
3 accepted by the original journal to which it was
4 submitted. I'm virtually certain of that because of
5 the difficulty getting into this journal. So I'm
6 fairly certain of that.

7 And I'm certain on the 2004 paper, it was
8 accepted by the journal submitted to.

9 Q It was accepted on submitted?

10 A Oh, they never, they are virtually never
11 accepted as submitted.

12 Q That was the question, I was asking.

13 A I'm sorry.

14 Q Not did you have to shop it around.

15 A Okay.

16 Q But how many times did it come back from the
17 publisher?

18 A You know, if we're going to go another half
19 hour let's take a three or four minutes because we're
20 making too many mistakes.

21 Q I'm almost done.

22 A You don't want to do that, all right.

23 I didn't shop them around. They are never
24 accepted, I don't know that I've ever seen a paper
25 accepted as is without some slight changes. And I'm

1 sure in both cases changes needed to be made.

2 Q Do you know how many times it needed to come
3 back for either paper?

4 A I would be surprised if either of them came
5 back after the revision was submitted. I'd be
6 surprised.

7 Q Okay. Is it fair to say you just don't
8 recall?

9 A I'd say I'm 90 percent sure that they were
10 taken with the revision.

11 Q That's sure enough. Let's move on. I saw on
12 the ChemRisk website the other day there are a number
13 of papers that you refer to as being submitted for
14 publication, tentatively approved for publication but
15 have not been published yet?

16 A Mm-hmm.

17 Q Are you familiar with those papers?

18 A It depends. You'd have to show me which ones
19 you mean.

20 Q I can pull it up.

21 A Are they off my CV?

22 Q I don't know if they are on your CV or not.

23 A That's the only reason I can't answer the
24 question. Let's take a look.

25 Q Okay. In 2005 on the website, in review,

1 Williams and Paustenbach characterizing, historical
2 industrial hygiene data applied to occupational
3 environmental hygiene?

4 A That's not the complete title.

5 Q I understand. I'm just trying to give you
6 enough so that you know what paper I'm talking about.

7 A There are a couple with similar titles. Do you
8 want me to look at them?

9 Q Let me cut to the chase.

10 A Sure.

11 Q Will you provide me with copies of the papers
12 that are listed as being in review?

13 A Well, they are not relevant. I'm not going to
14 rely on them in the case. And I never share papers
15 that are in review. Nobody does. So I'm not going to.

16 Q I understand that you won't.

17 A Nobody does.

18 Q You have in the past?

19 A Not in review I haven't. I never submitted --
20 shared a paper in review.

21 Q I don't want to bicker with you but you did
22 submit it to Dr. Last and the Blue Ribbon Panel?

23 A No, that's different. And I don't know if it
24 was in review or accepted. But nonetheless, in
25 litigation I wouldn't have shared and I did that as a

1 professional courtesy as a very rare event. But I did
2 it anyway. And I don't recall if it was accepted or
3 not.

4 Q It was not.

5 A Okay. That's fine.

6 Q There was still revisions to be made.

7 A Okay.

8 Q I want to make a motion with the court. I
9 just want to clarify for the record it's been done in
10 the past.

11 A It's only been done in the case of professional
12 courtesy. It's never been done with respect to any
13 other purpose that I can recall.

14 Q You were working for a company facing
15 environmental liability or litigation liability for
16 chromium contamination at that time?

17 A That is absolutely wrong.

18 Q Okay.

19 A And I testified to that half a dozen times even
20 if Praglin mischaracterizes and basically lies about
21 it.

22 Q I don't want anything to do with that.

23 A And that's a fact and there is plenty of
24 evidence to support --

25 Q At that time you were not actively --

1 A That's a fact, I was not actively involved.

2 Q All right. We clarified that.

3 Have you provided testimony or been disclosed
4 as an expert by any company that manufactures, sells or
5 distributes asbestos-containing brakes, clutches or
6 automobile parts other than Ford, General Motors and
7 Chrysler?

8 THE WITNESS: Can I hear the question again?

9 (Record read.)

10 BY MR. RUCKDESCHEL:

11 Q Let me restate the question. Let's break it
12 up. Have you provided testimony for any company
13 regarding brakes, clutches or gaskets other than -- in
14 connection with asbestos, other than Ford, General
15 Motors and Chrysler?

16 A I am going to ask for it to be read back.

17 Q I'll say it again. Have you provided
18 testimony for any company other than Ford, General
19 Motors and Chrysler in any asbestos case relating to
20 brakes, clutches or gaskets?

21 MR. LANKFORD: Objection to the form.

22 THE WITNESS: I don't know what the problem is
23 with the form. I have been involved in litigation
24 involving gaskets. And I have testified in a deposition
25 on gaskets.

1 BY MR. RUCKDESCHEL:

2 Q Who was your client in that case? Let me
3 rephrase it. What was the manufacturer involved in
4 that case?

5 A Who manufactured the gaskets?

6 Q Yeah.

7 A I don't recall.

8 Q On whose behalf --

9 A I'm not even sure I knew the name of the
10 gasket.

11 Q On whose behalf were you testifying?

12 A I guess it's publicly known. It was Buffalo
13 Pump.

14 Q Okay.

15 A It would be listed on what we just disclosed to
16 you.

17 Q Have you provided any testimony for any
18 manufacturers of brakes or clutches other than Ford,
19 General Motors or Chrysler?

20 MR. LANKFORD: Objection as to form and calls
21 for speculation as to what the business lines may have
22 been of the companies that he's provided testimony. You
23 mean on those topics?

24 THE WITNESS: Can I hear the question again?

25 BY MR. RUCKDESCHEL:

1 Q I want to know if you've testified on behalf
2 of the manufacturers of brakes, clutches or gaskets
3 other than Ford, General Motors or Chrysler?

4 A No.

5 Q Okay, there we go. And have you been retained
6 and disclosed as an expert for any companies other than
7 Ford, General Motors and Chrysler with respect to
8 exposure to asbestos from brakes, clutches or gaskets?

9 MR. LANKFORD: Objection to form.

10 THE WITNESS: Other than Buffalo Pump?

11 BY MR. RUCKDESCHEL:

12 Q Right.

13 MR. LANKFORD: And calls for speculation.

14 THE WITNESS: Not that I'm aware of.

15 BY MR. RUCKDESCHEL:

16 Q Okay. Doctor, do you intend to do any more
17 work relating to this case prior to trial?

18 A Only my standard and customary preparation for
19 trial.

20 Q And what would that involve generically?

21 A That would involve reading today's deposition,
22 seeing if I needed to do more work to more fully answer
23 your questions that I might anticipate in trial.

24 And I would of course, read any, reread any
25 papers in the recent time that you've asked me about to

1 refresh my memory in preparation for trial.

2 MR. RUCKDESCHEL: Doctor, with that said I have
3 no more questions. I appreciate your time and your
4 courtesy.

5 I, because I must, I open the floor. Gentlemen
6 on the phone?

7 MR. BELL: Yes.

8 MR. RUCKDESCHEL: Wake up. Any questions?

9 MR. SALNER: Craig Salner, no questions.

10 MR. BELL: Henry Bell, no questions.

11 MR. BURKE: This is Tom Burke. I have no
12 questions.

13 MR. GIRTMAN: Ben Girtman. No questions.

14 BY MR. RUCKDESCHEL:

15 Q Doctor, you have the right to read and sign
16 this transcript or the right to waive that right.

17 A I'd like to have the opportunity to read and
18 sign and correct, and I also ask for two copies of the
19 DVD. And I understand these are both expedited; is
20 that right?

21 Q They have been expedited.

22 A And trial is going to start in about ten days?

23 Q That is correct.

24 A Okay. I'll see you at trial.

25 MR. RUCKDESCHEL: Counsel, I request we be

1 requested with copies of Dr. Paustenbach reliance
2 materials if you can work with me on arranging copies.

3 MR. LANKFORD: Agreed.

4 MR. RUCKDESCHEL: I would ask that the court
5 reporter take possession of the exhibits and distribute
6 them with the transcript. And with that we will go off
7 the record.

8 THE VIDEOGRAPHER: This concludes the
9 deposition of Dr. Paustenbach. Off the record. The
10 time is 6:52.

11 //

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8
9 I, DENNIS J. PAUSTENBACH, PH.D. ,D.A.B.T., do
10 hereby declare under penalty of perjury that I have read
11 the foregoing transcript; that I have any corrections as
12 appear noted, in ink, initialed by me; that my testimony
13 as contained herein, as corrected, is true and correct.

14 EXECUTED this ____ day of _____,
15 2005, at _____, _____.
16 (City) (State)

17
18
19 _____
20 DENNIS J. PAUSTENBACH
21 PH.D., D.A.B.T.
22
23
24
25

1
2
3
4 I, the undersigned, a Certified Shorthand
5 Reporter of the State of California, do hereby
6 certify:

7 That the foregoing proceedings were taken
8 before me at the time and place herein set forth; that
9 any witnesses in the foregoing proceedings, prior to
10 testifying, were placed under oath; that a verbatim
11 record of the proceedings was made by me using machine
12 shorthand which was thereafter transcribed under my
13 direction; further, that the foregoing is an accurate
14 transcription thereof.

15 I further certify that I am neither
16 financially interested in the action nor a relative or
17 employee of any attorney of any of the parties.

18 IN WITNESS WHEREOF, I have this date
19 subscribed my name.

20
21 Dated: _____
22
23
24

25 _____
MARY F. NELSON
CSR No. 3553

A				
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