

IN THE CIRCUIT COURT
THIRD JUDICIAL CIRCUIT
MADISON COUNTY, ILLINOIS

IN RE: ALL MADISON COUNTY)
ASBESTOS LITIGATION,)
)
Plaintiffs,)
)
vs.)
)
UNION CARBIDE CORPORATION,)
et al.,)
)
Defendants.)

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VIDEOTAPED DISCOVERY DEPOSITION OF
DR. ALLEN R. GIBBS
Taken on Behalf of Plaintiffs
Monday, February 18, 2008
New York, New York
Time: 10:16 a.m.

By: Josephine H. Fassett, CSR, CLR

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I N D E X O F E X A M I N A T I O N

DEPONENT: DR. ALLEN R. GIBBS

| | |
|---------------------------------|--------|
| Examination by Mr. Hartley..... | 15,303 |
| Examination by Mr. Bishop..... | 297 |

AFTERNOON SESSION - 118

I N D E X O F E X H I B I T S

| | |
|---|----|
| Exhibit No. 1 | |
| Curriculum Vitae of Dr. Allen R. Gibbs..... | 13 |

| | |
|----------------------------------|----|
| Exhibit No. 2 | |
| Affidavit of Allen R. Gibbs..... | 13 |

| | |
|--|----|
| Exhibit No. 3 | |
| List of Articles and/or Documents Referenced | |
| by Dr. Allen R. Gibbs..... | 13 |

| | |
|--|----|
| Exhibit No. 4 | |
| Plaintiffs' Amended Notice To Take | |
| Videotaped Discovery Deposition (Originally | |
| Scheduled for Saturday, January 12, 2008)..... | 32 |

I N D E X O F E X H I B I T S

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Exhibit No. 5
 Plaintiffs' Second Amended Notice To Take
Videotaped Discovery Deposition (Amended as to
Schedule A)..... 32

Exhibit No. 6
 Objections to Plaintiffs' Discovery
Deposition Notice of Allen Gibbs, M.D..... 116

Exhibit No. 7
 Cross-Notice of Taking Discovery
Deposition..... 117

Exhibit No. 8
 Document titled Special Contributions,
Correspondence about Publication Ethics and
Regulatory Toxicology and Pharmacology..... 270

 Original Exhibits 1 through 8 were retained by
the court reporter to be copied for all parties
ordering and the original Exhibits 1 through 8 are
to be returned and retained by Mr. Christian H.
Hartley of Richardson, Patrick, Westbrook &
Brickman, LLC.

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ASBESTOS LITIGATION,)
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)
Defendants.)

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VIDEOTAPED DISCOVERY DEPOSITION OF DR. ALLEN
R. GIBBS, produced, sworn, and examined on behalf of
the Plaintiffs, Monday, February 18, 2008, between
the hours of 10:16 a.m. and 4:39 p.m. on that day,
at the offices of Alston & Bird, LLP, 90 Park
Avenue, New York, New York, before Josephine H.
Fassett, a Certified Shorthand Reporter, Certified
LiveNote Reporter and Notary Public of the State of
New York.

A P P E A R A N C E S

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3
4 The Plaintiffs were represented by Mr.
5 Christian H. Hartley on behalf of Richardson,
6 Patrick, Westbrook & Brickman, LLC, 174 East Bay
7 Street, P.O. Box 879, Charleston, South Carolina,
8 29401-2132.

9
10 Appearing Telephonically, all
11 SimmonsCooper Plaintiffs were represented by Ms.
12 Jackalyn Olinger on behalf of SimmonsCooper, LLC,
13 707 Berkshire Boulevard, East Alton, Illinois,
14 62024.

15
16 The Defendant, Union Carbide Corporation,
17 and the witness, Dr. Allen R. Gibbs, were
18 represented by Mr. Bruce Bishop on behalf of Willcox
19 & Savage, P.C., 1800 Bank of America Center, One
20 Commercial Place, Norfolk, Virginia, 23510.

21
22 The Defendant, Union Carbide Corporation,
23 was represented by Mr. Colin K. Kelly on behalf of
24 Alston & Bird, LLP, One Atlantic Center, 1201 West
25 Peachtree Street, Atlanta, Georgia, 30309-3424.

26
27 The Defendant, Pneumo Abex, was
28 represented by Mr. James Walker Smith on behalf of
29 Smith Abbot, LLP, 48 Wall Street, New York, New
30 York, 10005.

A P P E A R A N C E S

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4 The Defendant, AK Steel, was represented
5 by Mr. Murphy S. Klasing on behalf of McGinnis,
6 Lochridge & Kilgore, LLP, 3200 Houston Center, 1221
7 McKinney Street, Houston, Texas, 77010.

8 The Defendants, Durametallic, Duriron, FWEC,
9 Garlock, Gardner Denver, Weil-McLain and Zurn, were
10 represented by Ms. Madina Axelrod on behalf of Segal
11 McCambridge Singer & Mahoney, 830 Third Avenue, Suite
12 400, New York, New York, 10022.

13 Appearing Telephonically, the Defendant,
14 A.O. Smith Corporation, was represented by Ms. Emily
15 Carlson on behalf of Crivello, Carlson, S.C., 710
16 North Plankinton Avenue, The Empire Building,
17 Milwaukee, Wisconsin, 53203.

18 Appearing Telephonically, the Defendant,
19 Illinois Central Railroad Company, was represented
20 by Mr. Michael C. Hermann on behalf of Gundlach,
21 Lee, Eggmann, Boyle & Roessler, LLC, 5000 West Main
22 Street, Belleville, Illinois, 62223.

23 Appearing Telephonically, the Defendants,
24 Kentile Floors, Inc. and Alpha Wire, were
25 represented by Mr. Jeremy B. Harris on behalf of
Guntly & McCarthy, 150 South Wacker Drive, Suite
1025, Chicago, Illinois, 60606.

A P P E A R A N C E S

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4 Appearing Telephonically, the Defendant,
5 Borg Warner, was represented by Mr. Gary L. Smith on
6 behalf of Herzog Crebs, LLP, 515 North 6th Street,
7 One City Centre, Floor 24, St. Louis, Missouri,
8 63101.

9 Appearing Telephonically, the Defendants,
10 Chrysler LLC and Union Carbide Corporation, were
11 represented by Mr. Kent L. Plotner on behalf of
12 Heyl, Royster, Voelker & Allen, P.C., 105 West
13 Vandalia, Mark Twain Plaza III, Suite 100,
14 Edwardsville, Illinois, 62025.

15 Appearing Telephonically, the Defendant,
16 Bell & Howell, was represented by Mr. Kurt J.
17 Schafers on behalf of Husch & Eppenberger, LLC, The
18 Plaza in Clayton Office Tower, 190 Carondelet Plaza,
19 Suite 600, St. Louis, Missouri, 63105-3441.

20 Appearing Telephonically, the Defendants,
21 The Sherwin-Williams Company and
22 Gibson-Homans/Baltimore-Ennis Lands Co., were
23 represented by Mr. Nicholas R. Lykins on behalf of
24 Johnson & Bell Ltd., 33 West Monroe Street, Suite
25 2700, Chicago, Illinois, 60603-5404.

26 Appearing Telephonically, the Defendant,
27 Mine Safety Appliances Company, was represented by
28 Mr. Mark Feldhaus on behalf of Lashly & Baer, PC,
29 714 Locust Street, St. Louis, Missouri, 63101.

A P P E A R A N C E S

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4 Appearing Telephonically, the Defendant,
5 Kubota, was represented by Mr. Jason C. Bache on
6 behalf of Lewis, Rice & Fingersh, L.C., One
7 Petticoat Lane, 1010 Walnut, Suite 500, Kansas City,
8 Missouri, 64106.

9 Appearing Telephonically, the Defendant,
10 American Optical Corporation, was represented by Mr.
11 Joseph R. Brown, Jr. on behalf of Lucco, Brown,
12 Threlkeld & Dawson, LLP, 224 St. Louis Street, P.O.
13 Box 539, Edwardsville, Illinois, 62025.

14 Appearing Telephonically, the Defendant,
15 Eastman Chemical Company, was represented by Mr.
16 Jeffrey F. Starling on behalf of McGuireWoods LLP,
17 One James Center, 901 East Cary Street, Richmond,
18 Virginia, 23219.

19 Appearing Telephonically, the Defendants,
20 Armstrong Pumps, Inc., Avocet Enterprises, Inc.,
21 Bryan Steam Corporation, Jaquays Mining, Mannington
22 Mills, Inc., Siemens Corp., Siemens Energy &
23 Automation, Siemens Stromberg-Carlson, Texas
24 Refinery Corp. and The William Powell Company, were
25 represented by Mr. Daniel J. Connell on behalf of
McKenna Storer, 33 North LaSalle Street, Suite 1400,
Chicago, Illinois, 60602.

A P P E A R A N C E S

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4 Appearing Telephonically, the Defendants,
5 John Crane and Cleaver-Brooks, were represented by
6 Mr. Benjamin Pucci on behalf of O'Connell, Tivin,
7 Miller & Burns, LLC, 645 Tollgate Road, Suite 220,
8 Elgin, Illinois, 60123.

9 Appearing Telephonically, the Defendant,
10 Honeywell International, Inc., was represented by
11 Ms. Nicole Behnen on behalf of Polsinelli Shalton
12 Flanigan Suelthaus, P.C., 100 South 4th Street,
13 Suite 1100, St. Louis, Missouri, 63102.

14 Appearing Telephonically, the Defendant,
15 FXY, Inc., AAMCO Transmissions and Bowater Forest
16 Products, were represented by Mr. Bradford Miller on
17 behalf of Reeg & Nowogrocki, LLC, 120 South Central
18 Avenue, Suite 750, St. Louis, Missouri, 63105.

19 Appearing Telephonically, the Defendants,
20 Ford Motor Company and General Motors Corporation,
21 were represented by Mr. Joseph P. Sullivan on behalf
22 of Sanchez, Daniels & Hoffman, LLP, 333 West Wacker
23 Drive, Suite 500, Chicago, Illinois, 60606.

24 Appearing Telephonically, the Defendant,
25 Yarway Corporation, was represented by Mr. Philip
Sholtz on behalf of Spencer, Fane, Britt & Browne, 1
North Brentwood, Suite 1000, St. Louis, Missouri,
63105.

A P P E A R A N C E S

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Appearing Telephonically, the Defendant,
Sterling Fluid Systems (USA) LLC, was represented by
Mr. John O'Sullivan on behalf of Swanson, Martin, &
Bell, LLP, One IBM Plaza, Suite 3300, 330 North
Wabash, Chicago, Illinois, 60611.

Appearing Telephonically, the Defendants,
Carver Pump, Chicago Pneumatic Tool Company, LLC,
Conwed Corporation, Corrigan Company Mechanical
Contractors, Guard-Line, H.B. Fuller, Hennessy
Industries, Inc., Northrop Grumman Systems
Corporation, The Gorman-Rupp Company and Welco
Manufacturing Company, were represented by Mr. Dale
L. Bode on behalf of Walker & Williams, P.C., 4343
West Main Street, Belleville, Illinois, 62226.

Appearing Telephonically, the Defendant,
Millennium Petrochemicals, Inc., was represented by
Ms. Carol Lin on behalf of Wildman, Harrold, Allen &
Dixon, LLP, 225 West Wacker Drive, Chicago,
Illinois, 60606.

A L S O P R E S E N T :

Lee Bowry, Videographer

* * *

1 * * *

2
3 (Whereupon, all attorneys appearing
4 telephonically identified themselves as
5 follows:

6 MR. PLOTNER: Kent Plotner with Heyl
7 Royster's office for Chrysler LLC and local
8 counsel for Union Carbide.

9 MS. CARLSON: Emily Carlson with
10 Crivello Carlson.

11 MR. LYKINS: This is Nick Lykins with
12 Johnson & Bell, L-y-k-i-n-s.

13 MR. FELDHAUS: Mark Feldhaus with
14 Lashly & Baer representing Mine Safety
15 Appliances Company.

16 MR. HERMANN: Mike Hermann from
17 Gundlach Lee representing Illinois Central.

18 MR. STARLING: Jeff Starling with
19 McGuireWoods representing Eastman Chemical
20 Company.

21 MR. SHOLTZ: This is Philip Sholtz
22 with Spencer Fane.

23 MR. MILLER: This is Brad Miller from
24 Reeg & Nowogrocki.

25 MR. CONNELL: Dan Connell, McKenna

1 Storer.

2 MR. BACHE: Jason Bache, Lewis, Rice &
3 Fingersh.

4 MR. BODE: Dale Bode, B-o-d-e, from
5 Walker & Williams.

6 MS. LIN: Carol Lin from Wildman
7 Harrold.

8 MR. PUCCI: Ben Pucci, P-u-c-c-i, with
9 O'Connell, Tivin, Miller & Burns.

10 MR. SMITH: Gary Smith with Herzog
11 Crebs.

12 MS. BEHNEN: Nicole Behnen,
13 B-e-h-n-e-n, from Polsinelli.

14 MS. OLINGER: Jackie Olinger,
15 O-l-i-n-g-e-r, SimmonsCooper.

16 MR. HARRIS: Jeremy Harris with Gunty
17 & McCarthy.

18 MR. O'SULLIVAN: John O'Sullivan with
19 Swanson.

20 MR. SCHAFERS: Kurt Schafers with
21 Husch & Eppenberger.

22 MR. BROWN: Joe Brown for American
23 Optical, Lucco Brown et al.

24

25 * * *

* * *

(Curriculum Vitae of Dr. Allen R. Gibbs marked as Exhibit 1, as of this date.)

(Affidavit of Allen R. Gibbs marked as Exhibit 2, as of this date.)

(List of Articles and/or Documents Referenced by Dr. Allen R. Gibbs marked as Exhibit 3, as of this date.)

* * *

IT IS STIPULATED AND AGREED by and between counsel for the Plaintiffs and counsel for the Defendants that the deposition of DR. ALLEN R. GIBBS, may be taken in shorthand by Josephine H. Fassett, a Certified Shorthand Reporter and Notary Public of the State of New York, and afterwards transcribed into typewriting, and the witness will read and sign the transcript.

* * *

1 * * *

2
3 THE VIDEOGRAPHER: This is the
4 videotaped deposition of Dr. Allen Gibbs.

5 Today's date is February 18, 2008 and
6 the time is 10:16 a.m.

7 This is the case of In re: All
8 Goldberg Heller Antognoli Rowland Short &
9 Gori, P.C. Asbestos Cases versus Union
10 Carbide Corporation in the Circuit Court,
11 Third Judicial Circuit, Madison County,
12 Illinois.

13 My name is Lee Bowry. I am a
14 videographer representing Pohlman Reporting
15 Company located on 10 South Broadway, St.
16 Louis, Missouri.

17 All counsel will be reflected on the
18 stenographic record.

19 Will the court reporter swear in the
20 witness, please?

21
22 * * *

23
24
25

1 DR. ALLEN R. GIBBS,
2 being of lawful age, being produced, sworn, and
3 examined on the part of the Plaintiffs, and after
4 responding "I do" to the oath administered by the
5 court reporter, deposes and says:

6 MR. KLASING: And, I'm sorry, could
7 the videographer put his phone number on the
8 record just so we have it if we need
9 reference to order tapes?

10 THE VIDEOGRAPHER: I don't have the
11 Pohlman number handy.

12 MR. KLASING: It's through Pohlman?

13 THE VIDEOGRAPHER: Yes, through
14 Pohlman Reporting.

15 MR. KELLY: And I want to make one
16 correction to just the video record.

17 This is Colin Kelly for Union Carbide.

18 The style of this case is actually In
19 Re: All Madison County Asbestos Litigation.

20 EXAMINATION BY

21 MR. HARTLEY:

22 Q Good morning, Dr. Gibbs. My name is
23 Christian Hartley. I don't think we've ever met
24 before.

25 A No.

1 Q You have given depositions in the
2 past, true?

3 A Correct.

4 Q You understand that this is a
5 question-and-answer session where I'll ask you
6 questions and you're to answer them to the best of
7 your ability?

8 A Yes.

9 Q You have -- you understand that you're
10 under oath and there is -- there are penalties for
11 not telling the truth here, right?

12 A Sure.

13 Q Okay. You have brought with you a
14 copy of what I've marked as Exhibit 1 which is it
15 says Curriculum Vitae at the top, right?

16 A Yes.

17 Q That is essentially your professional
18 resume?

19 A Yes.

20 Q It contains everything or everything
21 that you think is important about your work, your
22 life's work as it relates to pathology?

23 A Yes.

24 Q Okay. Everything on here you have, if
25 you put it on here, you worked on it?

1 A Yes.

2 Q Would it be proper to put something on
3 here that you didn't work on?

4 A No.

5 Q Would you want to rely on, on the work
6 of someone -- well, let me put it this way:

7 If someone's name appears on a
8 document, an article, something like that that
9 you're relying on and they didn't work on it, does
10 that cause you some concern?

11 MR. BISHOP: Object to the form.

12 Speculative.

13 A I'm sorry, say that again.

14 Q Let's say that you and I had an art --
15 there was an article out there published with your
16 name and my name on it. I didn't do anything on it
17 but it was published in a peer reviewed journal, and
18 you as a scientist would you have some concern about
19 putting someone's name on an article when you
20 didn't -- when they didn't work on it?

21 A Yes.

22 Q Why would that be?

23 A Well, generally the authorship of an
24 article that's peer reviewed and goes into the
25 scientific literature, the contributor should have

1 actually contributed something.

2 Q And to put their name on an article
3 when they didn't work on it would be essentially
4 lying, wouldn't it?

5 MR. BISHOP: Objection.

6 A It's not lying but it's not a good
7 practice to do that.

8 Q And it would cause you some concern if
9 you found out that someone who, let's say there was
10 an author who you respected, a well-noted scientist
11 that you thought they did good work and it turned
12 out their name were on some articles that you were
13 relying upon, when they didn't work on them, that
14 would give you some concern, wouldn't it?

15 A It would. What I would say is,
16 though, that there are various university
17 departments where particularly heads of departments
18 sometimes go on papers that come out of the
19 department. They don't actually directly work on
20 the particular study but they have been involved
21 with setting up the infrastructure in which that
22 study would not have been able to have been
23 conducted. That may be reasonable to do that,
24 though.

25 Q Okay. That would be the only

1 circumstance that you can think of where it would be
2 appropriate for a scientist to put his name on an
3 article where he didn't actually work on it, true?

4 A Yes, I think so. I mean I haven't
5 really thought in great depth about this particular
6 question, but yes.

7 Q Okay. Someone I would -- who's an
8 author whose reputation you respect in your field?

9 A Well, there would be Julian Peto, J.C.
10 McDonald.

11 Q Okay. Well, let's take one of those.

12 If there were an article with -- that
13 I authored and Julian Peto authored together, okay,
14 and you read it and you thought oh, this is
15 something I think I can rely on, one of the reasons
16 you would rely on it would be because you respect
17 Julian Peto, right?

18 A That wouldn't be the major issue with
19 the article. I would actually look at the content
20 of the article, see if the methodology of the study
21 was sound, did the results, did they, were they in
22 line with results that have obtained similarly. I
23 tend to read the article, and particularly if you're
24 actually reviewing articles yourself for peer
25 reviewed journals, you often review the article

1 without knowing the authors.

2 Q Okay.

3 A So it's the quality of the paper that
4 matters more than the actual authorship, but, of
5 course, certain individuals have done a lot of
6 studies and they've gained their reputation not
7 generally through one paper but by a whole series.

8 Q Okay. As a peer reviewer sometimes
9 you have questions for the authors that you submit
10 to the journal to find out if, find out if they have
11 an answer, true?

12 A Yes. If I've got some, if I think the
13 paper has left certain things not resolved that I
14 think the paper could be improved by, or if the, the
15 text is not clear, that may be another criticism, or
16 maybe the paper is based on some underlying
17 misinterpretation of the science because whoever was
18 doing the study and not really familiar with that
19 field and may be new to it.

20 Q Authors of peer reviewed works should
21 be able to provide the data to the peer reviewers so
22 that they can check the work, true?

23 A Yes -- yes.

24 Q Is there any reason why an author of a
25 peer reviewed study should refuse to give the data

1 to people who are interested in it?

2 MR. BISHOP: Objection: Overly broad.

3 A Well, there could be issues if -- of
4 confidentiality in terms of if individual patients
5 are identified. That could be an issue.

6 Q That would be an issue that could be
7 gotten around by sanitizing the personal information
8 on the data, true?

9 A Yes.

10 Q For instance, in epidemiology we don't
11 need to know the names of the people who are the
12 statistics, we just need to know what the statistics
13 are, true?

14 A Yes.

15 Q Okay. And if an author refuses to
16 give information when it's requested about a study,
17 that would be important to you, wouldn't it?

18 A Well, it depends when it's requested.
19 If it's, if it's at the time of a peer review
20 process, that would be very unusual. If that
21 question came up eight, nine, ten years later, then
22 it may be that that data is not still not around. I
23 mean, you know, I think people are now sort of
24 sinking in a sea of paper that is quite unmanageable
25 often and sometimes they cull stuff after they may

1 think that it ceases to have any major relevance;
2 the paper's been published, the results have been
3 published, nothing came up about it at that time,
4 you're five, ten years down the line, maybe you
5 can't be expected, I think, to keep the stuff in
6 perpetuity. People also move, they tend to cull
7 things then.

8 Q Okay. You understand that there's the
9 ability to preserve data in a much more compact form
10 such as in computer files, right?

11 A Yes, but some of that data that was
12 probably done 20 years ago would actually, I'm not
13 an expert on data storage, et cetera, but may well
14 require quite a lot of time on various people's part
15 which may well be funded.

16 Q Okay. When you work on peer reviewed
17 works, it's important that you, when you offer a --
18 offer information in an article, that it be
19 supported by data and facts, true?

20 A Yes.

21 Q For instance, it would be
22 inappropriate to make a, to make a conclusion in an
23 article when you don't have any data to support it,
24 true?

25 A Well, there's two elements to that

1 and, you know, papers vary in the style at which
2 they're done. It could be that the conclusion is
3 based on other people's work and it's referred to in
4 the paper, or it could be based on specific data
5 from a particular study in that paper, so it varies.

6 Q It would not be proper to refer to
7 data as being in progress and then -- when it wasn't
8 in progress and saying we say this information, for
9 a paper to say this fact based on a study in
10 progress when the study isn't in progress, true?

11 A Well, if the study is not in progress,
12 of course, various definitions were also in
13 progress. I mean, people may have looked at it, I
14 don't know, it could be some cases they are working
15 on it and then other things come in and divert them
16 to other things. I mean, we've, I think if you've
17 done research and you get involved in this
18 particular field, and if you're, if you're a busy
19 person, you tend to have papers that you haven't
20 completed and, you know, I'm guilty of that, I have
21 a number of things that I have never completed I
22 should have done 10, 12 years ago and I'm still
23 waiting for the long period of rainy days to
24 actually do that, but.

25 Q Do you have any, do you have any work

1 in progress relating to Calidria that you haven't
2 finished yet?

3 A No.

4 Q Okay. Back to Exhibit 1. Pardon my
5 foray off into some issues.

6 What is, what is an MB new word C-h-B
7 1970?

8 A It's the same as your M.D.

9 Q Okay. So you are, in fact, a medical
10 doctor?

11 A I'm a medical doctor.

12 Q Okay. Do you see patients?

13 A I don't see patients directly as such,
14 I'm not a clinician, I'm a pathologist, so I do
15 autopsies on patients, and I read the biopsies that
16 have been taken from patients and I meet with
17 clinicians at multi-disciplinary meetings where we
18 discuss patients but I don't directly work with live
19 patients.

20 Q Okay. You don't and have not treated
21 patients?

22 A Oh, yes, I've treated patients. When
23 I was, prior to going into pathology when I
24 qualified as a doctor, I did two years where I saw
25 patients.

1 Q Okay. During that time did you see
2 people with asbestos-related diseases?

3 A Yes, because I was in the northeast
4 where I did my post-physician the equivalent of your
5 internships.

6 Q Okay.

7 A And the Northeast Newcastle at one
8 time was, in those days a big ship building area and
9 so there were lots of asbestos-related cases, and I
10 saw some of them because I for part of the time
11 worked on a chest ward.

12 Q Okay. What sorts of cases did you see
13 in the chest ward that you thought were asbestos
14 related at that time?

15 A We had some cases of asbestos, there
16 were some lung cancers and probably some
17 mesotheliomas, but they were relatively scarce I
18 think at that time.

19 Q At that time you also saw other sorts
20 of cancers that were considered at the time to be
21 asbestos related, true?

22 A Lung cancer.

23 Q Okay. What about GI cancers?

24 A No, well, we don't associate, they're
25 not, there's not a consistent relationship.

1 Q At the time, however --

2 A No, not in, not in Newcastle in the --
3 was it ever considered that gastrointestinal cancers
4 were linked to asbestos.

5 Q Okay. There were, however, authors
6 who were publishing in the peer reviewed literature
7 at that time who were linking gastrointestinal
8 cancers and other sorts of cancers to asbestos
9 exposure, true?

10 A Yes.

11 Q And why did you in Newcastle Upon Tyne
12 decide not to do that?

13 A There were certain people, if I
14 remember correctly, I have to try and remember the
15 exact periods of time, but there were certainly
16 Dr. Ashcroft and Professor Heppleston, both
17 pathologists in fact. Ashcroft -- Heppleston had
18 done a lot of stuff on lung pathology mainly in
19 terms of coal dust exposures but he knew the
20 occupational literature well. And Ashcroft actually
21 specifically worked on asbestos-related diseases. I
22 cannot remember either as being a medical student or
23 as a, what we call a houseman then of being taught
24 asbestos exposure was linked to cancer other than
25 mesothelioma and lung cancer.

1 Q And that timing, what time was that
2 the time period you're talking about?

3 A That was 1970.

4 Q Okay. And was that just for one year
5 that you were --

6 A I moved then to Cardiff at the end of,
7 I qualified in 1970 and I moved to Cardiff in '71
8 and then I did a year in the Respiratory Unit there,
9 which is right very close to the MRC Pneumoconiosis
10 Research Unit, and certainly there were asbestos
11 cases there.

12 Q Cardiff has a good number of coal
13 worker cases too, right?

14 A That's the unit was originally set up
15 for the study of coal workers' disease but then it
16 broadened into the other dust-related diseases.

17 Q By putting on your, on your
18 qualifications that you are, in fact, a medical
19 doctor, an MB ChB, you did that because it's true,
20 right?

21 A Yes.

22 Q You would never put it on there if it
23 weren't true?

24 A No.

25 Q You completed all of the rigorous

1 criteria to become a doctor, true?

2 A Yes, I'm a fully registered doctor,
3 and I could have become a physician if I had chosen
4 to, to do that.

5 Q Okay. What is MRCPPath?

6 A MRCPPath, that's the membership of the
7 Royal College of Pathologists. It's the equivalent
8 of your board certification in pathology.

9 Q Okay. And by putting that on there,
10 that's, if I were to translate that to our local
11 terms, that would be saying you're board certified
12 in pathology?

13 A Yes.

14 Q And there's a reason that you have a
15 special set of initials for that, right?

16 A Yes.

17 Q And that's because why, what did you
18 do to get those initials?

19 A You have to complete, at that time it
20 was basically five years training in pathology and
21 you had to do a staged series of exams.

22 Q You --

23 A So it was, it was basically by
24 examination. There are other ways of getting a
25 MRCPPath. It's sometimes given as an honorary

1 qualification when somebody has done a lot of
2 research in a particular field and that is included
3 pathology. It tends to be given for non-medical
4 graduates who can't get it by examination, it is
5 not, although it's honorary, it's not regarded in
6 the same light as having it by exam.

7 Q Right. You earned yours, the people
8 who got it as an honorary, kind of got it as a gift,
9 right?

10 A Yes, although, you know, some of those
11 worked very, very hard to produce the kind of
12 research that allowed them to have it as a gift, if
13 you'd like.

14 Q You would find it personally
15 offensive, wouldn't you, if a pathologist put
16 MRCPPath on their, on their resume when they didn't
17 earn it, right, or get it as an honor?

18 A Well, if they didn't get it on either
19 of those two ways, they wouldn't have it, so they
20 shouldn't put it on there.

21 Q Because if they don't, if they don't
22 have it, they shouldn't put it on there because
23 putting it on there when you don't have it is lying,
24 true?

25 A Well, it's false, yes.

1 Q Okay. It would give you concern if
2 people, if people in your field, pathologists, lied
3 on their CV's, wouldn't it?

4 A Yes. I mean CV's should reflect what
5 you've done.

6 Q Okay. Have you taught anywhere,
7 taught in medical school or in the like?

8 A Yes.

9 Q Okay. And you, likewise, if you put
10 it on your resume that you taught somewhere, you
11 should have taught there, correct?

12 A Yes. I mean I haven't put on my
13 resume everywhere that I've taught. I mean I give
14 both undergraduate, that's to medical school and
15 medical students, in the past it was sometimes to
16 dental students and nurses --

17 Q Sure.

18 A -- and so on. But I now regularly
19 give lectures to medical students and also
20 postgraduate lectures which may be in Cardiff or
21 they may be in other parts of the U.K., sometimes
22 it's Europe and sometimes I've lectured in North
23 America as well.

24 Q Okay. What are some of the most
25 prestigious universities in the U.K.?

1 A Well, it depends. You know, certain
2 subjects are stronger in some universities than
3 others. I suppose if you, if you want the most
4 famous universities, then you would probably go and
5 talk about Oxford and Cambridge.

6 Q Okay.

7 A But, but it depends on what particular
8 subject you're interested and there may be a
9 specific area which a university will be stronger at
10 than others.

11 Q Okay. It would be wrong to imply, for
12 instance, that in your resume that you were a
13 teacher at Oxford, for instance, when you were not,
14 true?

15 A Correct.

16 Q And if somebody did that on their CV,
17 that would give you some concern about them,
18 wouldn't it?

19 A Yes.

20 THE VIDEOGRAPHER: Could we go off the
21 record for one second?

22 MR. HARTLEY: Yes.

23 THE VIDEOGRAPHER: Going off the
24 record. The time is 10:36 a.m.

25 (Whereupon, off the record.)

1 (Plaintiffs' Amended Notice To Take
2 Videotaped Discovery Deposition (Originally
3 Scheduled for Saturday, January 12, 2008)
4 marked as Exhibit 4, as of this date.)

5 (Plaintiffs' Second Amended Notice To
6 Take Videotaped Discovery Deposition (Amended
7 as to Schedule A) marked as Exhibit 5, as of
8 this date.)

9 (Whereupon, resumed.)

10 THE VIDEOGRAPHER: We're back on the
11 record. The time is 10:37 a.m.

12 BY MR. HARTLEY:

13 Q We'll come back to your CV in a little
14 bit, but I want to, I haven't really asked you much
15 about it but we'll come back to it.

16 I've marked as Exhibit 2 a copy of a
17 document that's -- that seems like a fairly elderly
18 photocopy of a document entitled the Affidavit of
19 Allen R. Gibbs, is that what I've done?

20 A Yes. I don't know whether it's
21 elderly, I mean I couldn't vouch for its exact
22 vintage, but.

23 Q Well, I guess it's -- it's dated in
24 2005, I don't know if that qualifies as elderly
25 either, but that is, in fact, what it is.

1 A Well, the copy is probably recent but
2 the document is 2005.

3 Q Okay. Fair enough.

4 Now, since 2005 have you updated your,
5 the Affidavit of Allen R. Gibbs that sets forth your
6 opinions about Calidria asbestos?

7 A No, I don't think so.

8 Q Okay. You have also brought with and
9 what we have marked as Exhibit 3 a copy of Dr. Allen
10 Gibbs' references which has been, I have been told
11 is what you will rely on in your opinions today?

12 A Yes.

13 Q Okay. And does this set forth all of
14 the documents, lists of -- lists 121 particular
15 articles that you are going to rely on in supporting
16 your opinions for Calidria, is that true?

17 A Yes.

18 Q Okay. Are there others that aren't on
19 here that you think should be?

20 A At this precise moment in time I don't
21 think so but of course I don't know exactly what
22 questions you're going to ask me and if your
23 questions go completely into different areas from
24 this, then I might need different literature, but.

25 Q Okay. I've marked as Exhibit 4 a copy

1 of the Amended Notice to take your videotaped
2 deposition. I think we spelled your name wrong, did
3 we? You have two L's in Allen?

4 A Yes. Yes, I'm two L's and an E.

5 Q Okay. We have two copies of that?

6 Oh, this is the Second Amended Notice,
7 so this is Exhibit 5.

8 Now marked as Exhibit 5 the Second
9 Amended Notice where we also spelled your name
10 wrong, but did you see either of those?

11 A I seen one of them but I can't
12 remember which one it was. It was one of those that
13 I gave to you.

14 Q You --

15 A I can't remember which it was that I
16 saw.

17 Q Okay. Did you review the list of
18 requests for things that we wanted you to bring?

19 A Yes, I looked through them.

20 Q Okay. Were there things that you had
21 that you didn't bring?

22 A I haven't been able to find all the
23 invoices and correspondence and things. What tends
24 to happen is, if I look at a case, I keep that file
25 on that case until the case is resolved in some

1 ways, and once that happens, it gets binned, so I
2 don't actually keep records going, specific cases
3 going back years because I would just sink under the
4 documents.

5 Q Okay. As a -- some of the first
6 people out there in the world who have access to the
7 Internet and e-mail were academicians, is that the
8 right word?

9 A Academicians?

10 Q Yes, that's the word I'm looking for.
11 Like yourself. Do you use that medium?

12 A I use the Internet, yes, particularly
13 for literature searches.

14 Q And in the, in the academic world do
15 you also communicate with others like yourself via
16 e-mail?

17 A Yes.

18 Q Okay. Do you have a policy in your
19 office of getting rid of old e-mail?

20 A I tend to, if, if it's something I
21 haven't got a deal with or I've dealt with, I tend
22 to get rid of the e-mail. I -- my office is
23 cluttered enough and I'm not the best at
24 de-cluttering, so I tend to, if I've got an e-mail I
25 need to deal with and I haven't dealt with it I tend

1 to leave it on the e-mail until I deal with it, once
2 it felt where I close it off.

3 Q Okay. Did you make any efforts to
4 check to see if you had any correspondence with any
5 people either at Union Carbide or any of the lawyers
6 that you've worked for over the years who worked for
7 Union Carbide?

8 A I did, I did speak to, I think it was
9 Mrs. Wood who --

10 Q That's Bruce Bishop's partner?

11 A Yes.

12 Q Yes.

13 A To see, and they said they could
14 provide all the, I think the billing documents that
15 you wanted and so forth.

16 Q Okay.

17 A Because I actually with a case I don't
18 always know that it's, that it's necessarily Union
19 Carbide or it could be more than one defendant, I
20 don't know who's doing the paying what.

21 Q Okay. What about the other aspect of
22 it that I was looking for, not the billing but the
23 information -- the communications that you had over
24 the years --

25 A Again --

1 Q -- which --

2 A Sorry, I don't want to cut you off.

3 Q -- which, which may have come
4 electronically by e-mail, did you make any efforts
5 to search for those just in case they didn't get
6 deleted?

7 A They, they were all deleted because
8 there's nothing I've, that I'm actually dealing with
9 from them at the moment. If, if, if it was
10 something dealing with a specific case that letter
11 or whatever it would be in the pile where that case
12 is.

13 Q Okay. Now do you --

14 A I don't always know which case is
15 Union Carbide or whatever.

16 Q To be clear, though, I'm asking you if
17 you made any efforts to check.

18 A I didn't, I had a quick look to see if
19 there was anything easily to hand them, there
20 wasn't.

21 Q Okay. You didn't, you didn't like
22 type into your computer something that would have
23 Union Carbide in the e-mail --

24 A It wouldn't --

25 Q -- program to see if it would bring up

1 any e-mails?

2 A I don't think it would do it.

3 Q And you didn't do it so you don't
4 know, right?

5 A No.

6 Q Okay. Is there any reason why you
7 don't, you wouldn't want to do that?

8 A No, no, I have no problem, I mean, you
9 know, with disclosing the documents. As I say, if
10 I, you know, I look 30, 40 cases a year, something
11 like that, maybe 50, if some have small piles of
12 paper, some have big piles of paper and I don't, you
13 know, once it's dealt with and the case is gone, it
14 goes.

15 MR. HARTLEY: Did y'all bring the
16 financial information that he says you were
17 going to provide?

18 MR. KELLY: It's already been, I think
19 on December 4th, 2007 we answered the
20 interrogatories that you propounded about how
21 much Dr. Gibbs has been paid by a certain
22 number of law firms and we disclosed that
23 amount.

24 MR. HARTLEY: Okay. All right. Did
25 that include Kelly Drye?

1 MR. KELLY: I don't actually remember,
2 Christian.

3 MR. HARTLEY: Okay.

4 MR. KELLY: I have to go back and see,
5 it's whatever the judge and what we agreed
6 to.

7 MR. HARTLEY: Okay. Thank you.

8 BY MR. HARTLEY:

9 Q With respect to the amounts of money
10 that you've been paid over the years, do you have an
11 estimate as to what you've earned in consulting for
12 Union Carbide and/or the lawyers who were
13 representing Union Carbide?

14 A No, I can tell you the global figure
15 for, you know, the last few years and what I earn in
16 total through the litigation, what proportion is
17 exactly Union Carbide's I don't know.

18 Q Okay. What do you earn from the
19 litigation?

20 A It's about a hundred, in the last few
21 years it's been about a hundred-and-twenty thousand
22 dollars.

23 Q Each year?

24 A Yeah, for about the last two, three,
25 four years I think.

1 Q Okay. And as a percentage of your
2 income is this a high percentage?

3 A Yes, it is a high percentage. It's
4 probably -- I'd have to do some dollar-pounds
5 calculations here.

6 Q You better get them to pay you in
7 pounds from now on --

8 A Yes.

9 Q -- or euros.

10 A Yes, I should be billing in pounds,
11 that's right, or euros even better, but I think
12 it's about a third probably of what I earn.

13 Q Okay. What about the percentage of
14 the time that you spend, of your professional time
15 that you spend on it, how much of your professional
16 time do you spend reviewing those stacks of
17 documents, the varying stacks of documents?

18 A 10 to 20 percent.

19 Q Okay. How did you first become
20 involved in asbestos litigation in the United
21 States?

22 A I think the first time I was at the
23 Pittsburgh International Pneumoconiosis Conference
24 which was I think around about '89 or something like
25 that and I was with Chris Wagner and some lawyers

1 were meeting him and they asked me if I would be
2 interested in looking at some cases.

3 Q Okay. And were those lawyers lawyers
4 that represented defendants in asbestos litigation
5 at that time?

6 A Yes.

7 Q Now, Chris Wagner was, in fact, paid
8 over the years by defendants in asbestos litigation,
9 true?

10 A It's my understanding he did, yes.

11 Q He hadn't disclosed that to the
12 professional community at that time, had he?

13 A I don't think it was a secret. I
14 mean, you don't tend to walk around the corridors
15 and say "Look, I've just been paid so much by so and
16 so," but I don't -- we generally knew that, that he,
17 you know, looked at some cases or whatever on the
18 medicolegal front.

19 Q Dr. Wagner is someone who is credited
20 for being one of the people who first identified
21 mesothelioma through a study, true?

22 A Yes.

23 Q There were some case reports
24 beforehand but he did a case series that a lot of
25 people believed established that asbestos exposure

1 can cause mesothelioma, right?

2 A Yes.

3 Q Early on Dr. Wagner did not say only,
4 only amphiboles caused asbestos, he said asbestos --
5 I'm sorry -- caused mesothelioma, he said asbestos
6 did, and then he refined his opinion over the years.

7 A Well, his paper that was the one you
8 were referring to, which is widely disseminated in
9 the literature, specifically linked it to
10 crocidolite asbestos.

11 Q Okay. And you know, don't you, sir,
12 that he did not, he did not say that chrysotile did
13 not cause mesothelioma until much later in his
14 career, true?

15 A Yes, although they were aware of the
16 different propensities quite early on but by the
17 middle sixties I think.

18 Q Okay. And one of the things, one of
19 the things that had changed over the time from 1960
20 until he came to the opinion that crocidolite was
21 the sole cause of mesothelioma was that he was
22 working for defendants in asbestos litigation, true?

23 A No, that's not the correct sequence of
24 events at all. A, I think you can go back, there's
25 a lecture in 1965, the wires lecture, by a

1 Dr. Gilson and was head of the Medical Research
2 Pneumoconiosis Unit in Cardiff at my hospital and
3 discusses quite a lot about the differences within
4 fiber types and they were, they really were not
5 convinced from quite early on that chrysotile was a
6 big player in mesothelioma. And the -- certainly in
7 the first, from about '60 to about '80, 1980 in U.K.
8 certainly the experience was that the majority of
9 mesotheliomas related to crocidolite asbestos. And
10 Dr. Wagner was involved with a number of factory
11 studies where the link seemed to be pretty clearly
12 with crocidolite and links with amosite were quite
13 weak and I think that's why he took the position
14 that he wasn't convinced that amosite was a cause of
15 mesothelioma.

16 Q Okay.

17 A Because he also, there was also the
18 South African experience as well where there were a
19 lot of mesotheliomas in the crocidolite mines in
20 South Africa but very few in the amosite, which was
21 Penge, and none even to this date in the chrysotile
22 mines.

23 MR. HARTLEY: I just have to object as
24 nonresponsive.

25

1 BY MR. HARTLEY:

2 Q Let me ask you maybe a more specific
3 question.

4 First, when did you, when was it, it
5 was 1989 when you came to the United States and
6 happened to meet with some asbestos defense lawyers
7 with Dr. Wagner, right?

8 A Yes.

9 Q You think right around there?

10 A Yes, but --

11 MR. BISHOP: I'm sorry, I don't know
12 whether he said that he had the meeting with
13 Dr. Wagner and the defense lawyers, you can
14 clear that up.

15 A I went to the meeting for the meeting.
16 I actually presented two papers at the conference.
17 And it was at the conference I think one evening
18 where Chris Wagner was with some lawyers and I was
19 seeing Chris Wagner and they asked me then if I
20 would be interested. I didn't know whether anything
21 would come of it.

22 Q Okay. Who were the lawyers
23 representing?

24 A The one I remember was Henry Garrard.

25 Q Okay.

1 A And I think that was Pittsburg-Corning
2 that I later learned.

3 Q Henry Garrard has also represented
4 Union Carbide over the years, right?

5 A Yes, I think he did, yes.

6 Q Okay. You know -- did you work with
7 Henry?

8 A Early on, and I've forgotten, there
9 were some point that he's -- I don't think for a
10 long time he's done any asbestos-related cases, I'm
11 not aware that I worked with him on anything on the
12 Union Carbide.

13 Q But you worked with his firm like
14 people like Bill Harvard, right?

15 A Yes.

16 Q Bill Harvard was someone who
17 represented many asbestos companies but Union
18 Carbide was one of them, right?

19 A Well, if you say so. I mean, I don't
20 actually specifically recall being involved with a
21 Union Carbide case with either Henry Garrard or Bill
22 Harvard at that time.

23 Q As a scientist who publishes in the
24 peer reviewed literature, it's become a matter of
25 course that scientists should disclose potential

1 conflicts of interest, true?

2 A Yes.

3 Q What are your potential conflicts of
4 interest in discussing matters about asbestos today?

5 A Well, I suppose my potential conflict
6 today is that I've been retained by a defendant.

7 Q Okay. Why is that a potential
8 conflict of interest? In your mind.

9 A Well, I think you're asking me if -- I
10 think you're asking me is that -- could that affect
11 my opinion.

12 Q No, I'm not, I'm asking you why do you
13 say -- you answered my question, I'm asking you why
14 you answered it that way.

15 A Well, generally people -- generally
16 people disclose, for example, if they have done a
17 study funded by a particular agency if that agency
18 was non-governmental and was commercial and had an
19 interest in that particular product or material or
20 whatever they were doing the study on then they
21 would declare that.

22 Q Okay. And that's because there's a
23 potential for bias, if someone is funding a study
24 there may be some desire by the source of the
25 funding to influence the outcome of the study, true?

1 A Yeah, there's a potential.

2 Q You've seen that, we've seen that
3 through history with the tobacco industry, for
4 instance, right?

5 A Yes, I don't want to get involved with
6 that particularly, but yes, there have been
7 conflicts in the past where things perhaps weren't
8 as open as they are now.

9 Q Okay. Have you worked in tobacco, for
10 the tobacco industry at all?

11 A I've only testified in cases of
12 claimed mesotheliomas due to tobacco use.

13 Q Okay.

14 A And not lung cancers.

15 Q When you say claimed, are you talking
16 about cases where the filters were the micronite
17 filters --

18 A Yes.

19 Q -- that contained crocidolite?

20 A That was where it was claimed, yes.

21 Q Okay. There wasn't any claim that
22 Marlboros were causing mesothelioma, right? It
23 wasn't the tobacco anyway?

24 A I wasn't involved.

25 Q Okay.

1 A I wasn't involved.

2 Q You haven't done any research outside
3 of, outside of the litigation world that where
4 funding was coming from the tobacco industry?

5 A No, I mean I've obviously done
6 research on lung cancer and risks and cigarette
7 smoking, et cetera, et cetera, but that's part of my
8 daily sort of work.

9 Q Okay. Did the tobacco industry fund
10 it --

11 A No.

12 Q -- in any way that you know of?

13 A No. no.

14 Q Okay. Same question with respect to
15 your work on asbestos-related disease. Have you
16 received any funding for any of the work that you've
17 done that has made it on to your curriculum vitae
18 from asbestos interests?

19 A Not from asbestos interest, the only
20 funding that we have got has come from government
21 sources basically.

22 Q Okay. So you have not received any
23 money from any corporations for any of your work
24 that ends up on your CV that relates to asbestos?

25 A No. No.

1 Q Okay. When you read papers that are
2 funded by someone be it a lawyer, a plaintiff's
3 lawyer or a company or a defense lawyer, does that
4 influence you at all when you read the paper?

5 A I go back to what I do with the peer,
6 if I'm peer reviewing a paper, I read the paper, try
7 and read the paper before really closely looking at
8 the authors and looking at anything at the bottom of
9 the page that says it's been funded by. I look at
10 the study, see if I think the study is reasonable.
11 If the conclusions drawn from the data that they
12 obtain looks okay and I'll look at that. I will look
13 at the authorship and then I will look to see if
14 there's any potential conflict of interest.

15 Q Okay. In those cases, in those -- I
16 don't mean cases. In those situations where an
17 article, after you've read it, it seems to make some
18 sense, there may be some questions you have, but
19 then you look at the, look at the acknowledgements
20 and the, you know, statements about potential
21 conflicts of interest or funding. In a situation,
22 in that sort of situation where if there was a data
23 gap in the paper that you noticed, would you be more
24 concerned about it if the paper had been funded by
25 someone who might have an interest in the outcome?

1 A It depends on what the data gap was.
2 Virtually every paper you read, you know, there are
3 data gaps. I mean it's just the nature of research
4 on human beings, if you'd like, whereas some things
5 we don't have that are either difficult or
6 impossible to get. It depends on what the nature of
7 the data gap is.

8 Q Okay. Some of the, some of the
9 important work on the issue of whether chrysotile
10 asbestos can cause mesothelioma comes from the
11 Canadian miner and miller data, true?

12 A Yes.

13 Q And that data is very important
14 because it's the foundation of your opinion, it's
15 some of it anyway is one of the foundations of your
16 opinion that chrysotile asbestos isn't a very potent
17 carcinogen, true?

18 A It's part of it.

19 Q Okay. And the relative strength --
20 it's a big part, isn't it, sir?

21 A It's a substantial part, I wouldn't
22 say it's necessarily the majority because here
23 there's a lot of other studies from other areas of
24 the world that also figure in the conclusions.

25 Q In terms of the, in terms of the

1 statistics, though, there are many thousands of
2 workers that were sampled in the Canadian data,
3 true?

4 A Oh, yes, in terms of, as an
5 epidemiological study it's important and it's very
6 thorough and it's got I think the longest follow-up
7 of any epidemiological study.

8 Q That data should be preserved so that
9 we could look at it, true?

10 MR. BISHOP: Object to the form,
11 vague, and go ahead.

12 A Yes.

13 Q I mean several authors have published
14 based on that data since its initial, since as it's
15 been increased over time authors, other authors have
16 relied on it, right?

17 A Yes.

18 Q The data was originally compiled by
19 Dr. McDonald in his cohort, I won't call them
20 cohorts because that's epidemiologic work, his
21 co-authors, true?

22 A Certainly I'm starting to get a little
23 bit confused in cohorts and co-authors and --

24 Q Yes, let me try again.

25 Dr. McDonald, J.C. McDonald, who you

1 mentioned earlier, is one of the main authors of
2 that data, true?

3 A Yes.

4 Q Dr. McDonald worked with several
5 different scientists over the years and built on his
6 original studies, true?

7 A Correct.

8 Q Each of those studies in that its
9 based on the original data should have had access to
10 the original data, true?

11 A I don't know, I mean these studies
12 going back over a lot of years, I could understand
13 if data has been lost from, you know, 15, 20, 30
14 years ago, and Dr. McDonald works in two locations,
15 you know, he was bridging the gap between London and
16 Canada. You've got different co-authors, you may
17 not have actually all the data yourself, it may be
18 split, I don't know, I don't know exactly how their
19 setup worked, but I think from early studies it
20 wouldn't be surprising to have lost data.

21 Q I'm not asking if you'd be surprised,
22 I'm asking you whether it's important that data be
23 available so that we can check it out today.

24 A Well, it would be nice if it was
25 available.

1 Q In fact, without, without being able
2 to get hold of that data, we don't know if the data
3 is reproducible, true?

4 A Well, I think --

5 MR. BISHOP: Object to the form.

6 A What I would say is there's been a
7 series of papers. The series of papers seemed to
8 have maintained a consistency in terms of the
9 findings. If you take those papers and compare them
10 with other papers looking at the same sort of issue,
11 they're consistent with the findings from those
12 other papers, so I think they have them.

13 Q That's not -- objection:
14 Nonresponsive.

15 One of the hallmarks and the
16 foundations of the scientific method is to be able
17 to reproduce results, true?

18 A Yes.

19 Q And the only way that we can know if
20 Dr. McDonald's and the subsequent author's results
21 are reproducible would be to have access to that
22 data, true?

23 A For that particular cohort, yes, if
24 you wanted to study that individual cohort, the
25 Canadian Quebec chrysotile miners and millers. If

1 you wanted to, if you thought there was a major
2 problem with it, you'd have to go to the data to
3 check that out.

4 Q And to be fair to you, you're not an
5 epidemiologist, right?

6 A Correct.

7 Q You don't practice epidemiology in the
8 sense that you don't do the -- you may contribute to
9 data that goes into a study but you don't actually
10 get up there, design a study, crunch the numbers,
11 things like that, right?

12 A Correct.

13 Q You aren't a statistician?

14 A No.

15 Q You wouldn't feel qualified to
16 criticize statistical methods in an epidemiologic
17 study?

18 A No.

19 Q You wouldn't be able to meaningfully
20 as an expert explain what a meta-analysis is, right?

21 A Well, I know what a meta-analysis is
22 but in terms of the minutia of meta analyses, no.

23 Q Right, you wouldn't be able to explain
24 as an expert how changing of some variable in a
25 meta-analysis would change the outcome of the

1 meta-analysis, right?

2 A I know that by altering certain
3 variables you can change it, in terms of the exact
4 detail of how that would be done, then that's not
5 within my expertise.

6 Q You're not an expert in meta-analysis;
7 is that fair?

8 A Correct.

9 Q Okay. Now, one thing that you do know
10 about meta-analysis is if you put in bad data, you
11 get out bad data, true?

12 A It's like anything else.

13 Q Garbage in, garbage out, right?

14 A Yes.

15 Q And that's, that's a familiar word and
16 term in the scientific community, isn't it?

17 A Yes.

18 Q So it's important to have good data to
19 get good scientific results?

20 A Yes.

21 Q Although with bad data we might get
22 the right results, you can't reproduce them, true?

23 A Tell me what you mean by bad data.

24 Q Yeah. Let's move on.

25 Now -- in your reliance materials you

1 identify two meta analyses that you rely on, did you
2 know that?

3 A If you say so, I know there are meta
4 analyses in the list.

5 Q Do you know -- can you think of any
6 you rely on off the top of your head?

7 A Well, there's the Hodgson-Darnton one
8 is a meta-analysis, I can't remember which is the
9 other meta-analysis.

10 Q Okay. All right. Hodgson and Darnton
11 is indeed a meta-analysis, though, you know at least
12 one of them.

13 Hodgson and Darnton talk about some of
14 the factors that affect --

15 A I suppose if you wanted to go to the
16 AS -- ASTDR and the EPA, their meta-analysis
17 basically.

18 Q Okay. All right. And I think the, at
19 least the EPA is and -- but we'll talk about that in
20 a little bit.

21 Hodgson and Darnton is a meta-analysis
22 and we've -- you know that, true?

23 A Yes.

24 Q Okay. And Hodgson and Darnton talks
25 about a few things in there. Do you think the

1 article is reliable?

2 A Yes.

3 Q You rely on it, in fact?

4 A Yes. When you -- you know, I agree
5 with most of it but there might be one or two
6 statements in the paper that I might not agree with,
7 but, you know, nothing's ever perfect.

8 Q Okay. In terms of the, in terms of
9 the paper, though, they, they did what they set
10 forth in the paper in their area of expertise,
11 right?

12 A Yes. I mean I know Hodgson, I've, you
13 know, spoken to Hodgson on several occasions over
14 the last 10, 15 years. We've actually lectured in
15 the same venue.

16 Q Okay.

17 A And as far as I'm concerned they're
18 reliable people.

19 Q Do you know Darnton?

20 A I have spoken to Darnton on the phone
21 once I think.

22 Q Okay.

23 A But I don't actually know him as well
24 as I knew Hodgson.

25 Q Is Hodgson a doctor?

1 A No, he's non-medical.

2 Q Okay. He's a --

3 A Statistician.

4 Q Okay. Now, do you know if

5 Dr. Dodson -- not Dodson -- if Mr. Darnton has
6 consulted for interests in asbestos litigation?

7 A I have no idea.

8 Q Okay. How did you come to talk to
9 him?

10 A Well, the -- I think we were
11 inquiring, HSC were funding a research project a few
12 years ago on lung, lung tissues, and I think we
13 talked to them about trying to apply for funds to do
14 some work on that particular study.

15 Q Okay.

16 A Hodgson I've spoken to over the years,
17 and I can't remember the exact context in which it
18 started. I think we might have been at one or two
19 meetings at the same time and discussed asbestos
20 generally and fiber, fiber exposures and the whole
21 thing, so.

22 Q Well, does Darnton -- I mean
23 Hodgson -- no, Darnton. Did I ask you about Darnton
24 or Hodgson now, I can't remember?

25 A You asked me about Darnton.

1 Q Okay. Hodgson, do you know, is he a
2 doctor or a statistician?

3 A No, no, go back.

4 Q Do you know -- you know both of them,
5 right?

6 A No, I don't know Darnton very well,
7 I've had one phone conversation with him. I know
8 Hodgson is non-medical, he's a statistician.

9 Q Okay.

10 A Darnton I think is non-medical but I'm
11 not absolutely certain.

12 Q Okay. Do you know if -- well, I'll
13 ask you more broadly so it will be easier because I
14 can't remember which one I asked.

15 Do you know if either of them have
16 worked with in asbestos litigation?

17 A Not to my knowledge.

18 Q Okay. In terms of Hodgson and
19 Darnton's 2000 meta-analysis that you rely upon,
20 have you read it recently?

21 A I haven't read it in the last few
22 months.

23 Q Okay. You understand that what --
24 well, let me ask you: Do you understand how they
25 are getting to the conclusions about the relative

1 potency of fiber type?

2 A Yes.

3 Q How are they doing that?

4 A Well, they basically are taking other
5 people's studies and they've taken estimates of
6 exposures, looked at the estimates of exposure and
7 then correlated them with the number of
8 mesotheliomas in particular cohorts.

9 Q Okay. And a meta-analysis is a
10 compilation of statistics from other statistical
11 studies, true?

12 A Yes.

13 Q And so if the statistics going into
14 the meta-analysis are bad, then the answers coming
15 out of it are bad too, right?

16 A Yes.

17 Q Okay. You understand from reviewing
18 that that there was some, they had some, there was a
19 great deal of concern about the quality of the dose
20 data, true?

21 A Yes.

22 Q And so, that being said, you would
23 have a great deal of concern about the quality of
24 the conclusions based on an article that admits that
25 their dose data was questionable?

1 A I don't, I don't think I have any big
2 issues over the ultimate conclusions. There may be
3 some fine-tuning of the data that is not possible to
4 do because there were no problem measurements of the
5 exposure, but I think the ultimate conclusion stand
6 up when you are aware of the remainder of the
7 literature.

8 Q Okay. So you -- some of the data
9 that's in there is Canadian miner and miller data,
10 right?

11 A Yes.

12 Q And you were aware that there is, that
13 there is a series of articles talking, including the
14 authors of some of those papers, that indicate that
15 the dose data is very sketchy from the Canadian
16 miner and miller cohort, right?

17 A Yes.

18 Q Some of the Canadian authors
19 themselves who were at McGill with Dr. McDonald
20 admit that their dose data is sketchy, I guess,
21 would be the best way?

22 A So, if you look at most of the
23 epidemiological literature in the asbestos field,
24 the dose data is estimate rather than true
25 measurement.

1 Q Right.

2 A And that doesn't only apply to
3 Canadian miners and millers, it applies to the
4 Charleston, South Carolina textile plant and it also
5 pertains to the Australian crocidolite mining.
6 There's a number of them. Because the actual
7 measurements of exposure at the, at the relative --
8 relevant time periods, the technology of measurement
9 and the exposure wasn't very good, it wasn't really
10 up to scratch at that time.

11 Q Right. And so what we have, we also
12 have, in order to come up with a relative potency,
13 they had to compare disease incidence and the dose
14 for cohorts exposed to chrysotile and also to the
15 statistical cohorts that are exposed to amphiboles
16 to come up with those relative potencies, right?

17 A Yes.

18 Q Okay. And the same problem with the
19 chrysotile measurements exist with the amphibole
20 measurements, true, that the data, those data is
21 very sketchy?

22 A Yes.

23 Q Okay. So what we're comparing is two
24 very sketchy estimates of dose and you -- is that
25 true?

1 A Yes.

2 Q Okay. And we're also going to be in
3 that same vein, especially in the earlier studies,
4 there were some concerns about misdiagnosis of cases
5 of mesothelioma, right?

6 A There could have been, yeah.

7 Q You know there were actually, don't
8 you, that some cases were missed back in the old
9 days?

10 A I don't know for certain. I mean, you
11 don't know what you've missed because you don't know
12 what what's, you know, there's no way of knowing
13 what has been missed, but there was a potential for
14 missing some cases that may not have been called
15 mesothelioma that were called lung cancer or
16 something.

17 Q Okay. And so what you're --

18 A So that would apply to the amphiboles
19 as well of course. It wouldn't be any different for
20 the chrysotile mining industry than it would be for
21 any other asbestos-related industry. It was at that
22 time there was, there was a certain quality of
23 diagnosis of mesothelioma which has improved over
24 the years.

25 Q Okay. One thing that might make a

1 difference in that would be the location of where
2 the study is done, true? For instance, if one of
3 the studies was in New Jersey where they had access
4 to all the great medical minds of New York and New
5 Jersey versus if they were out in the country
6 somewhere where the doctors weren't as familiar with
7 the diseases, true?

8 A Possible.

9 Q Okay.

10 MR. HARTLEY: We're going to change
11 the tape because its time to take a break.

12 THE VIDEOGRAPHER: Going off the
13 record. The time is 11:12 a.m. This is the
14 end of tape one.

15 (Whereupon, off the record.)

16 (Whereupon, resumed.)

17 THE VIDEOGRAPHER: We're back on the
18 record. This is 11:21 a.m. This is the
19 beginning of tape two.

20 BY MR. HARTLEY:

21 Q We were talking about potential
22 problems with the epidemiologic studies that were
23 going into meta analyses and I was asking you, and I
24 think you agreed with me, that it would be possible
25 for there to be problems in diagnosis in studies

1 that may have taken place where the medical
2 community wasn't as familiar with asbestos-related
3 diseases in the early days, true?

4 A It's possible.

5 Q Okay. And one of those places would
6 have been out in the, out in the very rural part of
7 Canada where the asbestos miners and millers lived,
8 right?

9 MR. BISHOP: Objection. Calls for
10 speculation.

11 A I don't know, I mean I don't know
12 where, you know, the chest diseases from that
13 particular location would actually gravitate to. If
14 they went, you know, were referred to Montreal or
15 somewhere like that, then the diagnosis would be
16 very good. I don't, I don't have any personal
17 information about that.

18 Q Right, but that's a potential problem
19 for any study, true?

20 A It's a potential problem.

21 Q And you've seen that sort of thing
22 referenced in the -- in discussions of epidemiologic
23 literature that sometimes there are problems with
24 diagnosis based on the level of competency, with no
25 offense to the physicians out there, but in the

1 area, true?

2 A Yes.

3 Q And certainly you know from your
4 experience that over time the knowledge amongst
5 people like yourself who diagnose mesothelioma has
6 developed over time, true?

7 A True.

8 Q But back in the early days when you
9 first started doing this there were a lot of people
10 who were coming to different conclusions looking at
11 the very same piece of pathology, right?

12 A I don't know if there were many. You
13 know, you have to sort of try and quantify that in
14 some ways. It might be a small percentage of cases
15 where there would be a major discrepancy between
16 individual pathologists which nowadays would usually
17 be resolved by immunohistochemistry but wasn't
18 possible then, but to say it's a huge proportion, I
19 don't think that would be accurate.

20 Q Okay. When you, when you were looking
21 at scientific studies, one of the things that you
22 look at is where they're published, true?

23 A Yes.

24 Q Mainstream journals get a little bit
25 more of your respect than not so mainstream

1 journals, right?

2 A Up to a point. You also have to look
3 at the time periods of various journals as well.
4 They sometimes change their complexion on editorial
5 boards, they refocus on different things. It can
6 vary.

7 Q One of the -- you reference some
8 studies in here in a journal called the Indoor+Built
9 Environment, right?

10 A Yes.

11 Q That is not a mainstream well-known
12 journal, is it?

13 A I, I don't know who knows about it and
14 who doesn't know about it, and I don't like the term
15 mainstream because it's too general, I mean what is
16 it?

17 Q Let me rephrase it.

18 A For a pediatrician --

19 Q It's not prestigious, right?

20 A For a pediatrician Occupational and
21 Environmental Medicine wouldn't be a mainstream
22 journal.

23 Q True. Let me put it to you this way.

24 A Okay.

25 Q It's not a prestigious journal that

1 would automatically have garnered your attention,
2 let's say in the 1990s?

3 A I don't, I don't tend to search
4 literature by journal, I tend to search literature
5 by subject.

6 Q Okay. You understand that the
7 Indoor+Built Environment was formed at the behest of
8 the tobacco industry, true?

9 A No, I have no, I don't know how it was
10 formed.

11 Q You understand, don't you, from your,
12 from your participation in the scientific community
13 that the tobacco industry made efforts to publish
14 literature that favored its position, true?

15 A I've not studied that in any detail, I
16 understand that people have said that, I have no way
17 of either saying yes or no.

18 Q Okay. And you're familiar, familiar
19 with the British Medical Journal, right?

20 A Yes.

21 Q Do you know that the British Medical
22 Journal published an article that indicated that the
23 roots of the Indoor+Built Environment Journal was
24 with the tobacco industry?

25 A No, I haven't seen that.

1 Q Okay. Now, when was the first time
2 you heard of that journal?

3 A Ten years ago or something, I can't
4 actually remember.

5 Q Okay. What was the first article that
6 you can think of that you heard of from that
7 journal?

8 A I don't, I don't recall now. I mean
9 I, you know, I can't remember the first paper I
10 read, either Lancet or Occupational and
11 Environmental Medicine.

12 Q Those were a lot longer ago, though,
13 right?

14 A Well, my long-term memory is much
15 better than my short-term memory, I can't actually
16 remember what journals I read papers over the last
17 week, so.

18 Q Okay. If the tobacco journal --
19 tobacco industry found, founded the Indoor+Built
20 Environment to help publish on secondary smoke
21 issues, environmental tobacco smoke issues, would
22 that give you concern about the quality of it?

23 MR. BISHOP: Object to the form.

24 Calls for speculation.

25 A If that was the situation, I don't

1 know that it was. Again, you have to read the
2 individual papers. I really haven't, I don't think,
3 looked at tobacco-related papers in that particular
4 journal, I've read other papers, but, so I have no
5 opinion on that either way.

6 Q Okay. If industry, if a journal was
7 founded by industry, that should be something that
8 the, that the people who read it should know about,
9 true?

10 A Well, it depends. If the industry has
11 given a sum of money and said, you know, form a
12 journal in looking at airborne particulates and how
13 they react with the lung, that's fine. If industry
14 gave the money and said, we only want you to publish
15 that and not this, or influenced the actual papers
16 that were published, that would be wrong. So there
17 are, I guess, many things that have been funded by
18 money that has been given by industrialists, loads
19 of museums, or industry, not necessarily a bad
20 thing, it depends on how that funding was given and
21 what were the strings attached to it.

22 Q Right. For instance, we know, you
23 probably know that like the Philip Morris has given
24 lots of money to museums around the world, right?

25 A I don't know what they give money to

1 or what they don't give money to.

2 Q There was a big bunch of articles
3 about that, about that when the tobacco litigation
4 was going on. Assume that that's the case just for
5 the purposes of us discussing how you would
6 criticize something. And assume also that you go
7 into the Metropolitan Museum of Art and you know,
8 you and I know that in this hypothetical that the
9 Metropolitan Museum of Art has gotten lots of money
10 from Philip Morris. And in that museum there are
11 these paintings from painters that you've never
12 heard of but they, and they all glorify tobacco and
13 show people winning races while smoking Marlboro
14 cigarettes. Would you think that you'd want to know
15 about that, wouldn't the public should know about
16 that editorial, the money that may have influenced
17 the editorial content of that museum?

18 MR. BISHOP: Objection: Vague.

19 Ambiguous. Calls for speculation.

20 A I mean I don't know this to be the
21 case or not the way you present it. If it was an
22 influence on the selection of paintings, well, it
23 should be in the public arena. I've been in the
24 Metropolitan Museum of Art.

25 Q It was a hypothetical, there's no,

1 there are no --

2 A I didn't notice what you're, you know,
3 alluding to.

4 Q Absolutely, and I didn't mean to
5 suggest that that was a true hypothetical, it was
6 one to get your reasoning out.

7 Similarly then would you agree with me
8 that if, if the tobacco industry funded the, and
9 created, funded the editorial board creation of that
10 Indoor+Built Environment, that should be out there
11 for the public to know so that they could say "Huh,
12 seems like they're publishing a lot of these papers
13 on environmental tobacco smoke and what would their
14 editorial board's potential for bias be," true?

15 MR. BISHOP: Same objection.

16 A Yes, the, how the editorial boards are
17 selected for that particular journal should be in
18 the public domain.

19 Q Okay. And have you published in that
20 journal?

21 A No, I haven't.

22 Q Not in the Indoor+Built Environment?

23 A I don't think so. If it's not on my
24 list in my CV, I don't recall ever publishing in
25 that.

1 Q Okay. Do you know if you've read
2 articles that were published in the journal?

3 A Oh, I've read articles in the journal,
4 yes.

5 Q Were those the ones that you've listed
6 here?

7 A I've read others as well. I think
8 there were stuff on the World Trade Center and the
9 fallout from that, particles and things. I think.
10 I mean I don't recall, I don't have an encyclopedic
11 memory that tells me, well, that article came from
12 that journal, that's not really a big issue to me.

13 Q Okay. Fair.

14 Now the -- there are a series of
15 articles in there by a gentleman named Edward
16 Ilgren, do you know who he is?

17 A Yes.

18 Q All right. Who is he?

19 A He's a medical doctor I think who
20 lives in Philadelphia.

21 Q Okay. Are you aware that he put on
22 his CV that he was a member of the Royal College of
23 Pathologists, MRCPATH, when he is not?

24 A I have not --

25 MR. BISHOP: Objection to form.

1 Broad.

2 A I have not seen his CV so I don't know
3 what he put on his CV.

4 Q Okay. You're not -- you haven't heard
5 that?

6 A No.

7 Q Okay. That would give you some
8 concern because that wouldn't be honest, right, if
9 he did that?

10 A Well, if he's put down MRCPATH and he
11 hasn't got one, then he shouldn't do it.

12 Q Right. And it wouldn't be honest to
13 put it on there to bolster your credentials, would
14 it?

15 A Correct.

16 Q And do you know that he also
17 represented in his CV that he was on the faculty at
18 Oxford when he was not?

19 A Again, I haven't seen his CV so I
20 don't know what he said in his CV.

21 Q Okay. Do you know that he testified
22 in a case that you also testified in?

23 A Which one are you talking about?

24 Q Do you know any?

25 A I don't know, I don't know when

1 Dr. Ilgren testifies or when he gives an opinion or
2 a deposition or whatever, I, I don't have any
3 involvement with Dr. Ilgren.

4 Q Okay. You testified in Federal Court
5 in Minnesota, didn't you?

6 A Yes.

7 Q Okay. And that was a case where you
8 were testifying on behalf of Union Carbide?

9 A Yes.

10 Q Did you know that Dr. Ilgren also
11 testified there?

12 A I may have known at the time, I don't
13 recollect now, I don't recollect who else testified,
14 I know that I testified, that's all I remember from
15 it.

16 Q Okay. And if I had provided a
17 transcript for you of that where he testified that
18 he did, he represented on his CV that he was a
19 member of the Royal College of Pathologists when he
20 wasn't, that you would accept that testimony,
21 wouldn't you?

22 A Well, yes --

23 MR. BISHOP: Objection.

24 A -- if you gave it to me but, again, I
25 don't know whether he is recognized by the college

1 or not.

2 Q Okay. Let me --

3 A You know, you're asking me lots of
4 hypotheticals and none of which I know the answer to
5 basically.

6 Q Right. What I'm getting -- well, let
7 me ask you this.

8 A I can give you the general drift that,
9 you know, people shouldn't put on their CV's things
10 that they haven't done or belong to institutions
11 that they shouldn't, I don't have a position or
12 opinion specifically about Dr. Ilgren.

13 Q Okay. Let me, let me represent a few
14 things in a new hypothetical to you and ask you
15 about this.

16 A Okay.

17 Q You understand that he -- do you know
18 who Eric Chatfield is?

19 A I think he's some sort of a
20 hygienist-type person, I'm not -- I've seen some
21 papers by Chatfield, I think
22 mineralogist-comma-hygienist, I'm not precisely sure
23 of his qualifications.

24 Q Okay. You understand that you have
25 cited to two articles -- a series of articles that

1 he and Dr. Ilgren list themselves as co-authors on,
2 right?

3 A Yes.

4 Q Okay. So those would be some that
5 you've seen, right?

6 A I've seen the papers, yes.

7 Q Okay.

8 A I mean I haven't seen the CV's of both
9 individuals and I don't know what their daily
10 practice is as such.

11 Q Okay. Assume for me, if you will,
12 that I proved to you that Dr. Ilgren represented
13 that he was on the faculty at Oxford when he was
14 not; that he represented on his CV that he was a
15 member of the Royal College of Pathology, an
16 MRCPPath; and that his papers that you rely upon
17 indicate that there is data in process for analyzing
18 Calidria when there wasn't, would that cause you
19 concern about relying on those papers that
20 Dr. Ilgren and Dr. Chatfield wrote relating to
21 Coalinga asbestos?

22 MR. BISHOP: Objection. Improper
23 hypothetical. Calls for speculation.

24 A I don't -- I would look at the papers
25 with concern but I don't think it would necessarily

1 change my opinion of them because the actual
2 experiments were not done by Ilgren and Chatfield,
3 they looked at the data from the experiments. The
4 experiments were done by Gene McConnell who is in
5 North Carolina Research Triangle. I mean he's
6 probably retired now actually. I did discuss the
7 Calidria thing with him because --

8 Q "Him" being McConnell or --

9 A Gene McConnell, yeah.

10 Q Okay.

11 A -- because I, we were involved with a
12 study looking at mesothelioma and SV40 some years
13 back and I came up in conversation and he said he
14 thought the conclusions were valid.

15 Q Okay.

16 MR. HARTLEY: Politely I object to the
17 nonresponsive portion.

18 MR. BISHOP: Just a second.

19 Whoever's on the phone, anybody on the
20 phone, if they can put their phone on mute
21 because what will happen is that noise will
22 keep others on the phone from hearing what's
23 being said here. Thanks.

24 BY MR. HARTLEY:

25 Q Under my hypothetical in a situation

1 where assuming for a minute that there's evidence
2 that Dr. Ilgren and Dr. Chatfield -- well, Dr.
3 Ilgren misrepresented on his resume that he was an
4 MRCPath; that he was on the faculty at Oxford when
5 he was not; and that there was a data gap where they
6 said in their paper that a study was in progress to
7 support one of their factual claims in the paper
8 when it wasn't, that would give you some concern
9 about those papers, true? In a hypothetical world.

10 MR. BISHOP: Objection. Same
11 objection.

12 A Well, in a general sense, I would need
13 to know the specifics of what the data gap is and
14 does it conflict with other studies.

15 Q Okay. You certainly -- you've agreed
16 with me that you shouldn't be putting false stuff on
17 your resume to puff up, to puff up your --

18 A True.

19 Q -- your credentials, right?

20 A Correct.

21 Q And that alone would give you some
22 concern if a scientist is putting stuff that's not
23 true on their CV to pump up their credentials,
24 right?

25 A Yes.

1 Q Okay. If that was going on, do you
2 think that the folks at Union Carbide should have
3 let you have known about that when you're going to
4 rely on those papers in this case?

5 MR. BISHOP: Object to the form.

6 A I think somebody's CV in relationship
7 to one issue and papers on another issue, I mean
8 curriculum vitae don't go into the journals when
9 they send these in for publication. I look at the
10 paper, I'm not too concerned with individuals, I
11 look at the papers. Are they coherent with what
12 I've seen in the literature generally what I've
13 encountered myself over a number of years, and
14 that's, those are the issues that are main. It may
15 be that there are a number of other papers that
16 could be the same, I have no knowledge about that.
17 I look at the quality of the paper, what it says,
18 what the data is in there, are their conclusions
19 reasonable, do they fit or are they completely out
20 of kilter with other sorts of studies, if it all
21 comes together in a coherent whole that's part of
22 epidemiology which is, you know, regarded as valid.

23 Q Dr. McConnell you mentioned earlier is
24 someone who has consulted for defendants in asbestos
25 litigation, true?

1 A I believe so, yeah.

2 Q Including Union Carbide, right?

3 A I don't know who he's consulted for.

4 Q Okay. Now, you're not suggesting that
5 Dr. McConnell vouch for Ilgren and Chatfield's
6 papers, are you?

7 A No, no, I think what he said was, when
8 he did the studies they were, I think they were
9 going to, they were going to get around to
10 publishing them later, they never did, but from his
11 recollection that's what they showed, that there was
12 no significant pathology in those animals.

13 Q Did Dr., Dr. McConnell tell you that
14 he was the person who did the research on the
15 animals that went into Ilgren and Chatfield's work?

16 A Yes, he was part of the experimental
17 team who set that experiment up.

18 Q He wasn't the, he wasn't the main
19 researcher, was he?

20 A I think there was Pinkerton as well
21 and McConnell. They usually work in teams.

22 Q Do you know who Dr. James Crapo is?

23 A Yes.

24 Q You know him as a litigation
25 consultant, true?

1 A I know him as a physician with
2 expertise in the field of occupational diseases and
3 others.

4 Q Okay. Have you ever read any articles
5 that you can think of where Dr. Crapo discussed
6 asbestos-related disease in humans?

7 A I can't recall offhand Crapo -- well,
8 I think Crapo was involved with some of these animal
9 studies originally.

10 Q Again, my question was as to humans.

11 A I think -- to human, I can't remember
12 specifically. I know there's been a lot of stuff on
13 airways disease that Crapo has published over the
14 years, I don't recall exactly asbestos.

15 Q Dr. Crapo is an expert and studies
16 asthma and chronic obstructive pulmonary disease is
17 his specialties, right?

18 A That's his specific interest, right.

19 Q He's not, he doesn't, he doesn't
20 provide medical advice to mesothelioma patients,
21 right?

22 MR. BISHOP: Objection.

23 A I really don't know what his daily
24 practice is.

25 Q One of the things that you think gives

1 someone expertise in an area is their continuing
2 work in the field, true?

3 A Yes.

4 Q One of the things that -- it's
5 important to continue to work in the field that
6 you're professing expertise in, isn't it?

7 A Yes. I mean the thing is, though, if
8 you took respiratory disease, it's a very big
9 subject, and you may not be actively researching in
10 a particular aspect of respiratory disease but you
11 would still have a lot of knowledge about that
12 particular disease within the respiratory framework.
13 It happens to a certain extent with me. I, if you
14 like, subspecialize in terms of things like
15 conditions like mesothelioma and so forth, but I
16 still have a basic understanding of asthma and
17 emphysema. I do autopsies on individuals where I
18 make an assessment of how much emphysema is in the
19 lung, et cetera, et cetera, and although it's not my
20 active research field, I still have knowledge about
21 it and I still follow the literature and I still,
22 you know, I have to give an opinion on the general
23 aspects of the topic.

24 Q If you were looking for an expert on a
25 topic, you would, about human disease, you wouldn't

1 turn to someone who hasn't written an article about
2 human disease ever and who hasn't written an article
3 about asbestos in 15 years, would you?

4 MR. BISHOP: Objection to form.

5 A I don't know. I mean if somebody has
6 actually worked experimentally on that particular
7 issue and is a very competent physician with a
8 knowledge of respiratory medicine, then that's a
9 reasonable thing to ask him to be an expert.

10 Q So if you want state-of-the-art
11 medical advice about a topic, you might turn to
12 someone who hasn't published in the field at all for
13 15 years and who has only published about animals,
14 right, is that what you're saying?

15 MR. BISHOP: Objection.

16 Argumentative.

17 A I think if it's somebody who actually
18 has background information on that, that's a
19 reasonable thing to do.

20 Q In that situation where someone has
21 only published a few papers that dealt with rats,
22 okay, and where they haven't published on humans
23 ever, and where they haven't published -- let me
24 finish my question -- and they haven't published
25 about asbestos at all for 15 years, what sorts of

1 things would you look at otherwise to see if you
2 would rely on that kind of person to give you some
3 information about asbestos-related disease in
4 humans?

5 A I would look to see if he had general
6 toxicological knowledge which would come through the
7 animal work. Did he have a general knowledge of
8 respiratory medicine in a, in a, in a daily, on a
9 daily basis. And I think that would be a reasonable
10 thing. You can't -- it's not always that you can
11 find an expert that, a designer expert, if you like,
12 that covers every aspect of what you would like to
13 do.

14 Q Well, when it comes to asbestos
15 medicine, you'd agree with me that it would be quite
16 easy to find someone who has been publishing for the
17 last 15 years on asbestos and who has been seeing
18 patients, who has been looking at humans and not
19 rats, true?

20 A I don't know how easy it is, I don't
21 know how many of these people are available, that's,
22 you know, I have no knowledge of that.

23 Q You know some people who would fit the
24 bill that you would turn to, right?

25 A Well, some people don't want to be

1 involved as an expert witness many times.

2 Q But there are plenty of people out
3 there who do, true?

4 A Well, some do, some don't.

5 Q You've been to some, you've been to
6 some lawyer conferences where there were other
7 people like that, right, who would come in --

8 A Yes.

9 Q -- who would offer expertise?

10 A Yes, but I've also been in meetings
11 where people have said to me I just don't want to do
12 that.

13 Q Now, in the papers that Ilgren and
14 Chatfield wrote that you rely on, the title includes
15 the statement something along the lines of Coalinga
16 Asbestos - A short, Amphibole-Free Chrysotile,
17 right?

18 A Yes.

19 Q The authors should have had data to
20 support their claim that the chrysotile from the
21 Coalinga region was all short, shouldn't they?

22 A Yes.

23 Q And you know from your experience in
24 this litigation that not all of the Coalinga
25 chrysotile is short, right?

1 A Well, it's predominantly short.

2 Q Right, but it's not all short, is it?

3 A Well, if you go back --

4 Q That's a yes or no really.

5 MR. BISHOP: Go ahead, you can answer
6 the question. I object to the form.

7 A It's predominantly short and it's
8 always been referred to as a short fiber.

9 Q Okay. And you know that in any, in
10 any given sample of Calidria chrysotile, Coalinga
11 chrysotile, that there are a large number of fibers
12 that are over 5 microns too, right?

13 A There's small percentage, not a large,
14 you know, number and percentage are different.

15 Q Right, that's true, I agree with you.

16 A It's a small percentage over 5
17 microns, and the interesting thing is, as the fibers
18 get longer, they get thicker.

19 MR. HARTLEY: Objection:

20 Nonresponsive.

21 MR. BISHOP: Go ahead, you can finish.

22 BY MR. HARTLEY:

23 Q You can finish but it's nonresponsive.

24 A Okay. And as the fibers get longer,
25 they get wider, and as they get wider, they get less

1 able to get in the lung.

2 MR. HARTLEY: Objection:

3 Nonresponsive.

4 BY MR. HARTLEY:

5 Q In addition, if you publish an article
6 that's entitled, that has, that says Coalinga
7 Asbestos - A Short Amphibole-Free Chrysotile, you
8 should have data that it is, in fact, amphibole
9 free, true?

10 A Yes.

11 Q Ilgren and Chatfield did not provide
12 any data to support the amphibole, amphibole-free
13 claim, did they?

14 A Well, I don't think they provided
15 specific data but there's data in the literature
16 that indicates that Coalinga is amphibole free.

17 Q Okay. And what literature is that?

18 A Well, they're listed on, they're on
19 the list there, if you want to -- do you want me to
20 go through them?

21 Q Is there, is there any published data
22 in a peer reviewed journal?

23 A There's the Campbell paper. There's
24 the Coleman article. Mumpton article. There's a
25 report which is not in the published literature by

1 Professor Pooley.

2 Q Okay. So it's your -- yes. Professor
3 Pooley is someone who did a litigation report that
4 said that Calidria was amphibole free, right?

5 A He was asked to look at the samples.

6 Q Right, by a lawyer?

7 A Yeah, that written article is what he
8 finds.

9 Q By Henry Garrard who we talked about
10 earlier?

11 A Yeah.

12 Q Okay. And he was a lawyer for Union
13 Carbide, true?

14 A Yes.

15 Q Okay. Now, it's your contention that
16 Campbell from 1980 indicates that Calidria asbestos
17 is amphibole free?

18 A I believe so.

19 Q Okay. And on what basis do you?

20 A I have to look at the paper.

21 Q I think that Mr. Bishop brought that
22 paper with you.

23 MR. HARTLEY: It's number 16.

24 While you're looking for that, I'm
25 just going to ask him some other questions,

1 if that's okay, Bruce?

2 MR. BISHOP: Sure.

3 BY MR. HARTLEY:

4 Q The article by Coleman.

5 A Yes.

6 Q Coleman is a geologist who has been
7 retained by Union Carbide, true?

8 A I don't know whether he was retained
9 by Union Carbide, it's a published paper by Coleman.

10 Q Okay. Now, Coleman is the one who in
11 a geological magazine reported about there being a
12 lack of mesothelioma in people exposed to Calidria,
13 right?

14 A Yes.

15 Q That's not the kind of thing you'd
16 turn to a geologist for, is it?

17 A Well, I think if you were looking, you
18 know, even geologists know that there's a risk of
19 mesothelioma occurring, most geologists know that
20 there's a risk of mesothelioma with asbestos in a
21 general sense. I don't think it would be
22 unreasonable in a geological journal to refer to
23 some things medically just as it is quite not
24 infrequent in a medical journal to refer to
25 geological matters.

1 Q Okay. Clearly Dr. Coleman was not
2 publishing an epidemiologic study, right?

3 A Well, it's a mineralogy paper, it's
4 not an epidemiology situation, is it?

5 Q Is the answer to my question then yes,
6 he was publishing a mineral -- a paper not an
7 epidemiologic study?

8 A Yes.

9 Q Okay. And, in fact, if you -- even
10 though you're not an epidemiologist, if you look at
11 what he says about the incidence of disease there,
12 you recognize that you can draw no scientific
13 conclusions about whether that asbestos causes
14 mesothelioma from that paper, true?

15 A Yes.

16 MR. BISHOP: Object to the form.

17 A Yes, I wasn't relying on that specific
18 statement.

19 Q It would be inappropriate, in fact,
20 with what little data he gives you to rely on what
21 he says in that paper about the work histories and
22 the health of the workers who were exposed to that,
23 true?

24 MR. BISHOP: I'm going to object

25 unless you show him the statement that you're

1 talking about.

2 Go ahead.

3 A Should we have a look at the paper?

4 Q Well, let me ask you first. You

5 remember it, right?

6 A Yes.

7 Q When there's not enough information in

8 a -- to -- for something to be an epidemiologic

9 study, you wouldn't want to rely on it to make

10 statements about whether or not something is a

11 causative factor in disease, true?

12 A It wouldn't be this --

13 MR. BISHOP: Objection.

14 Go ahead.

15 A It wouldn't be the sole information

16 I'd rely on, it would be just something that I would

17 read and put into the memory bank along with the

18 other things.

19 Q Did you ever know Kilton Lewenson in

20 your work in the U.K.?

21 A No, I don't think so.

22 Q You don't know who he is?

23 A Vaguely -- no, I can't recall.

24 Q We found a document which is number 16

25 on your, on your list of documents that you rely on

1 and it, you indicated that it provides evidence that
2 Calidria is amphibole free. Can you point out that
3 portion of that document that does that?

4 A (Reviews.)

5 Well, I guess basically it says that
6 it's a short fibered chrysotile.

7 Q Okay. So it doesn't say it's
8 uniformly short or anything like that, true?

9 A It says the ore body is unusual
10 because of the virtual absence of long fibers and
11 the high chrysotile content of the ore, it doesn't
12 specifically refer to amphibole.

13 Q Okay. And you know from reading
14 Dr. Pinkerton's papers on the animals and some of
15 the related work that they're xx in any given sample
16 of Calidria that pound for pound as compared to
17 Canadian chrysotile there are a very similar amount
18 of long fibers, true?

19 A Well, it depends on how you look at
20 the samples. If you look at them in the air, you
21 can find by phase contrast microscopy fibers that
22 are longer than five. But if you then put them into
23 some sort of solution, they're all short fibers
24 because they break up very quickly, and that fits
25 with the animal experiments that have been done.

1 Q Okay. So Pinkerton's work shows that
2 pound for pound, in a pound of Calidria and in a
3 pound of Canadian chrysotile, there are an equal
4 number of long fibers, true, that's what that work
5 says?

6 MR. BISHOP: Objection.

7 A I have to check it, I have no reason
8 to disagree, but you've got to remember pound for
9 pound there would be a lot more fibers in Ca -- in
10 the Calidria than there would be in the Canadian
11 chrysotile samples.

12 Q Right. So for any --

13 A But the percentage would still be
14 longer because you're basically giving them a lot
15 more Calidria, you might end up with the same number
16 of fibers.

17 Q Right. Okay. Fair enough. So for
18 any, you understand that some of the products that
19 Calidria went into were things like joint compounds,
20 right?

21 A Yes.

22 Q So for any, any mixture of joint
23 compound that contained a pound of Calidria and a
24 pound of Canadian chrysotile mixed in with the other
25 ingredients, there would be a lot more fibers from

1 that pound of Calidria than there would be from that
2 pound of the Canadian, true?

3 A Yes.

4 Q Okay. And in that, that, that mix
5 with a pound of Canadian and a pound of Calidria in
6 there with that other stuff, there would be as many
7 long fibers from the Calidria as there would be from
8 the, from the Canadian, true?

9 A Possibly.

10 Q Well, it's true, isn't it, it's not
11 just possibly true, it is true?

12 A I don't, I don't know if anybody's
13 actually done precise measurement in the joint
14 compound --

15 Q Oh, okay.

16 A -- which fibers fiber for fiber.

17 Q Okay. But at least based on what we
18 know from the -- there isn't a lot of data out there
19 assaying the fiber lengths of Calidria, is there?

20 A Not a lot.

21 Q And one of the ones that's most
22 important is what Pinkerton did because he was the
23 one who was focused on using that chrysotile in his
24 experiments, true?

25 A Yes.

1 Q Okay.

2 A Yeah.

3 Q In general terms as exposure dose goes
4 up, does latency go down when it comes to
5 mesothelioma?

6 A Yeah. If you're talking about
7 amphiboles, yes. If you -- the statistical models
8 that have been developed show that the greater the
9 intensity of the exposure, the shorter the latency.

10 Q Okay. You mentioned earlier and you
11 rely on in your materials some, some -- something
12 that you said, ATSDR, are you talking about a
13 report, it's the Report on the Expert Panel of
14 Health Effects of Asbestos and Synthetic Vitreous
15 Fibers, SSVF?

16 A Yes.

17 Q Okay. That's not a document that
18 actually was written by the ATSDR, is it?

19 A It was a document written for ATSDR.

20 Q Right. It was a -- it was basically
21 the report of a meeting that was held and the report
22 was written by an organization called the Eastern
23 Research Group, right?

24 A I think that's quite, I've attended an
25 ATSDR meeting, not on asbestos, on talc, but I think

1 that's the general way they do things, they hand the
2 research out to another agency to provide a report
3 and then they review it themselves.

4 Q Okay. But that's what it is, it's not
5 an official document of the ATSDR, right?

6 A I don't, I don't know what the ATSDR
7 regards as an official document, I don't know the
8 actual mechanics of the ATSDR.

9 Q The ATSDR also -- well, let me start
10 again.

11 The ATSDR is a research organization
12 that researches toxicology for the United States
13 Government, right?

14 A Yes.

15 Q That is not a public health
16 organization, is it?

17 A No.

18 Q Okay. They provide to the government
19 what they believe the scientific evidence shows,
20 true?

21 A Yes.

22 Q They consider, you know from reviewing
23 their documents over time that they consider all of
24 the evidence and render opinions to the government
25 about toxicology matters?

1 A Yes.

2 Q Okay. You know that the ATSDR has
3 written a profile about asbestos?

4 A I don't know if the ATS has written a
5 profile, I know of the document that's supplied to
6 the ATS, ATSDR.

7 Q Okay.

8 A I mean I'm -- I think it's quite hazy
9 what the ATSDR itself writes and what it adopts from
10 other agencies that have written a document.

11 Q Okay. I guess then you're not
12 familiar with the multi-hundred page document that's
13 entitled A Toxicological Profile for Asbestos that
14 was written by the ATSDR?

15 A Yeah, what was the date on it?

16 Q 2001.

17 A I don't think I've seen it.

18 Q Okay. Would you be surprised, given
19 your knowledge of the medical information that was
20 available up to 2001, that the ATSDR came to the
21 conclusion that all types of asbestos including
22 chrysotile caused mesothelioma in humans?

23 MR. BISHOP: Objection. Calls for
24 speculation.

25 A I'd like to see the exact statement of

1 what they wrote.

2 Q Okay.

3 A So I've not given --

4 Q You can't tell me whether that would
5 surprise you I guess?

6 A No.

7 MR. BISHOP: Objection.

8 A I think I need to see what they said
9 and then I'd know whether it surprised me or not.

10 Q Okay. As best you can tell, though,
11 as you sit here, you haven't read that document,
12 right?

13 A Correct.

14 Q It's a document that's just too big to
15 bring with me or I would provide it to you. It's --
16 I have -- you understand that the U.S. Government
17 makes many documents available by electronic means,
18 right?

19 A Yeah.

20 Q That you can get a portable document
21 for that or PDF version of many of their documents?

22 A Yes.

23 Q One of which I have downloaded from
24 the ATSDR and is entitled A Toxicological Profile
25 for Asbestos. I've got it pretty big on my

1 computer, I couldn't bring it because it's 440
2 pages, but can you see it says Toxicological Profile
3 for Asbestos?

4 A Yes.

5 Q And that below that where I'm
6 scrolling down to it says U.S. Department of Health
7 and Human Services Public Health Service and then
8 the name of the agency, right?

9 A Yes.

10 Q Okay. And, let me go to the next
11 page.

12 In the Forward of this document, which
13 is on page 5 of the 441-page PDF, it says in the
14 second paragraph, "The ATSDR toxicological profile
15 succinctly characterizes the toxicology --
16 toxicologic and adverse health effects information
17 for the hazardous substance described therein," did
18 I read that right?

19 A Yeah.

20 Q And you can see that far, I apologize
21 for this, it's just one of those things?

22 A Yes, I can see it.

23 Q Okay. Does that indicate to you that
24 this document is the agency's statement about the
25 health effects of asbestos?

1 A At that time, yeah.

2 Q Okay. And I'll come back to that one
3 when I get it to the place where I need it to go,
4 but --

5 Okay, that's fine.

6 In this document on page 403 of 441 it
7 says Consensus Issues and Conclusions, do you see
8 that?

9 A Yes.

10 Q Okay. And then it says "There is
11 general agreement among scientists and health
12 agencies on the following issues and conclusions
13 regarding the health effects from asbestos.

14 "Number one. Exposure to any asbestos
15 type, i.e., serpentine or amphibole, can increase
16 the likelihood of lung cancer, mesothelioma and
17 non-malignant lung and pleural disorders." Did I
18 read that right?

19 A You read it correctly.

20 Q Okay. Does it appear to you that that
21 is the consensus and conclusion of the ATSDR as of
22 2001?

23 MR. BISHOP: I'm going to object. I
24 don't think it's appropriate to show him one
25 page of a 400-and-some-page document without

1 him having an opportunity to see it,
2 particularly since he said that he's never
3 seen and reviewed the entire document before,
4 all he can do is say that that's what's
5 printed on that page.

6 A I mean that's what it says.

7 Q Are you -- do you doubt that that's
8 what the ATSDR says in their Conclusion section?

9 MR. BISHOP: Same objection.

10 A I don't doubt that's what it says in
11 the Conclusion section, but you'd actually have to
12 read in to the document and see what they say about
13 serpentine and amphibole and whether they've
14 actually, for practical purposes, separated
15 chrysotile containing tremolite from chrysotile,
16 because some of the documents when they talk about
17 chrysotile, it's chrysotile inverted commas with
18 tremolite.

19 Q Okay.

20 A Unless, unless you see the detail of
21 the document, I don't know whether they actually
22 separated them out or not.

23 Q Okay.

24 MR. HARTLEY: I'll object to the
25 nonresponsive portion.

1 BY MR. HARTLEY:

2 Q You haven't read this document --

3 A Correct.

4 Q -- right?

5 A Yes, sir.

6 Q So your opinions that you're going to
7 offer to the jury and that you offered in this
8 Affidavit that we've marked as Exhibit 2 were not
9 made with the benefit of reading what the ATSDR had
10 to say about asbestos?

11 A Well, I read the other ATSDR document.

12 Q Right, which isn't published by the
13 ATSDR and isn't the position of the agency, right?

14 MR. BISHOP: Objection.

15 A I don't know whether it's the position
16 of the agency or not.

17 Q Okay. You don't know what -- if the
18 ATSDR document that is a report of a meeting is the
19 position of the agency but --

20 A I don't know whether it's been adopted
21 as such or whether it's going to go into another
22 group to reconsider, I don't know what stage it's
23 at.

24 Q You certainly formed your opinions
25 about Calidria without reading this 441-page

1 toxicological profile on asbestos, true?

2 A Correct.

3 Q I take it that you disagree with the
4 conclusions stated in this document that I read to
5 you?

6 A As the conclusion, as it's written
7 there without any qualification, I would disagree
8 with.

9 Q Okay. Do you agree with this
10 statement when it comes to the, and again I'm
11 referring to this, this is what this document writes
12 is our, there's general agreement among scientists
13 on these points, okay, do you see that?

14 A Well, I don't think there is general
15 agreement about the issue of chrysotile causing
16 mesothelioma, so it's --

17 Q I understand that's what you, you
18 don't agree with it, I want to ask you about these
19 statements. We understand, you've made it clear
20 that you don't agree with that, I want to ask you
21 about the other ones now, okay?

22 A I'm sorry, I thought you were talking
23 about general agreement.

24 Q We're talking about the document. The
25 document, this document says --

1 MR. BISHOP: The 465-page document
2 that the doctor hasn't reviewed, right?

3 MR. HARTLEY: 441-page.

4 MR. BISHOP: 41, sorry.

5 BY MR. HARTLEY:

6 Q That's what this document says, the
7 document is representing here, that I'm showing you
8 from the ATSDR, are representing that these points
9 that they have listed here are consensus
10 conclusions, right? That's what the document says,
11 you don't have to agree with them.

12 MR. BISHOP: Same objection. You've
13 shown one page, he can state what's stated on
14 that page.

15 A It says Consensus Issues and
16 Conclusions.

17 Q The next one that they write, and I
18 want to know after I've read it to you whether you
19 agree with it, is, "Important determinants of
20 toxicity include exposure concentration, exposure
21 duration, and frequency, and fiber dimensions and
22 durability," is that a consensus issue in the
23 scientific community that you're --

24 A Yes.

25 Q Okay. So you disagree with one and

1 you agree with two, right?

2 A Yes.

3 Q Okay. That does give you some, that
4 does give you some comfort that they were
5 considering some of the things that you thought they
6 might not have considered, right?

7 MR. BISHOP: Objection. Calls for
8 speculation.

9 A I presume that they were considering
10 those issues.

11 Q Okay. The third statement that they
12 make here, and I want to know afterwards, and I'm
13 going to do that with several of these, okay, so you
14 tell me whether you agree with it as a consensus
15 conclusion that you hold, okay, or that there is a
16 consensus in the scientific community; is that fair?

17 A Yeah.

18 Q Okay. "Fibers of amphibole asbestos
19 such as tremolite asbestos, actinolite asbestos and
20 crocidolite are retained longer in the lower
21 respiratory tract than chrysotile fibers of similar
22 dimension," is that consensus in the scientific
23 community as far as you're concerned?

24 A Yes.

25 Q Okay. I want to talk to you about

1 number 7. "The time between diagnosis of
2 mesothelioma and the time of initial occupational
3 exposure to asbestos commonly has been 30 years or
4 more."

5 A Yes.

6 Q You agree that that's a consensus in
7 the scientific community?

8 A Yes.

9 Q "Cases," and I'll go to number 8,
10 "Cases of mesothelioma have been reported after
11 household exposure of family members of asbestos
12 workers and in individuals without occupational
13 exposure who live close to asbestos mines," is that
14 a consensus in the scientific community as far as
15 you're concerned?

16 MR. BISHOP: Same objection.

17 A Yes.

18 Q Now there are some Unresolved Issues
19 and Discussions, do you see that --

20 A Yes.

21 Q -- there's a heading there?

22 One of them is, "Does exposure to
23 asbestos increase the risk for gastrointestinal
24 cancer," is that an unresolved issue in your mind?

25 MR. BISHOP: Same objection.

1 A I don't think it's unresolved, I don't
2 think, I don't think the data supports that there is
3 an association.

4 Q What about the rest of the scientific
5 community, are there people in the scientific
6 community who do believe that there is a
7 relationship between exposure to asbestos and
8 gastrointestinal cancers?

9 A There are some but I think they're a
10 minority.

11 Q Okay. So as the ATR discusses it,
12 there are some, there are some unresolved issues?

13 A Did you say this was dated 2000?

14 Q 2001.

15 A 2001. So it probably was written in
16 2000. I mean we've had seven years further on, I
17 think the information that's come through has
18 basically been against asbestos increasing the risk
19 of gastrointestinal cancer.

20 Q Okay. Nonetheless, you would agree
21 that there's some, there's still some debate about
22 that in the scientific community and therefore it's
23 an unresolved issue?

24 MR. BISHOP: Objection.

25 Mischaracterizes his testimony.

1 A Well, there's a debate in the small
2 proportion of the scientific community.

3 Q Here's one I think you mentioned
4 earlier, another one of the unresolved issues of the
5 assayers, "Are chrysotile fibers or amphibole fibers
6 primarily responsible for mesotheliomas in certain
7 groups of workers predominantly exposed to
8 chrysotile," that's an unresolved issue in the
9 scientific community, isn't it?

10 A I don't think it's --

11 MR. BISHOP: Objection:
12 Mischaracterizes.

13 A Again, I don't think it's unresolved,
14 no, I think all the information that's come through
15 has supported the position that chrysotile per se
16 doesn't cause mesothelioma.

17 Q They write in there at the bottom, and
18 I've underlined it, "Part of the difficulty in
19 ascribing primary responsibility in mesothelioma
20 cases is that chrysotile fibers are removed from the
21 lung much more quickly than amphibole asbestos
22 fibers and data on fiber content in the pleura,
23 pleural or peritoneal tissue in human cases are
24 few," is that a true statement?

25 A Yes, that's a true statement, but it's

1 only one element in the equation if you like as to
2 deciding whether chrysotile causes mesothelioma.

3 Q Have you done litigation consulting
4 work for any talc miners, millers, sellers?

5 A I looked at some cases some years ago
6 from New York State.

7 Q At the behest of R.T. Vanderbilt or
8 their lawyers?

9 A Yeah. It was Vanderbilt.

10 Q Okay. Are you working on anything to
11 do with -- do you have -- are you working on the
12 Minnesota Mining Cohort that were people who were
13 having -- were experiencing high rates of
14 mesothelioma?

15 A In what context?

16 Q Do you have anything to do with the
17 Iron Range --

18 A No. No.

19 Q -- studies that have been going on?

20 A No.

21 Q I think there's another Gibbs who does
22 that. Is there another Gibbs who's a pathologist?

23 A No, there's another Gibbs who is
24 basically a mineralogist-comma-hygienist --

25 Q Okay.

1 A -- who's Graham Gibbs.

2 Q That's fine. All right. Are you
3 familiar with his work?

4 A Yes, I've read a lot of papers by
5 Graham Gibbs.

6 Q Fred Pooley wrote that litigation
7 report that you said indicated --

8 A Well, it was a report of the Joe
9 Asbestos Mine and the King City Asbestos Plant, if
10 you like, looking at the mineralogical samples to
11 see what was in them.

12 Q One thing that's extremely important
13 in a publication quality paper is that the Materials
14 and Methods section be set out clearly and
15 accurately, true?

16 A Yes.

17 Q Dr. Pooley, or Mr. Pooley, I don't
18 know which he uses, is he a doctor?

19 A He's -- he is a doctor but he's a
20 Ph.D. doctor.

21 Q Okay.

22 A He's non-medical.

23 Q I'll call him Dr. Pooley to be nice.

24 Dr. Pooley is -- with no disrespect to
25 his education, I just want to call him Dr. Pooley.

1 Dr. Pooley is, his paper doesn't, that
2 you rely on, doesn't reach that level of setting
3 forth his methods such that you would be able to
4 rely, it would be one you'd want to publish, true?

5 MR. BISHOP: Objection. Calls for
6 speculation. Vague.

7 A If it, if it was going into the peer
8 reviewed literature, you'd put the findings
9 differently. The fact is that the Pooley method for
10 looking at fibers is published. It's been published
11 many times. It's actually the recommended way of
12 doing it for the WHOIR. So there's no secret of his
13 methodology and it's widely published so it's a
14 standard protocol so people know. The only thing
15 that was different is that he treated, in addition
16 to doing it in a conventional standard Pooley
17 method, he actually digested the added chemicals to
18 get rid of the chrysotile to see if there was any
19 amphibole present because that is the most sensitive
20 way of doing it, and he did that and there was no
21 amphibole.

22 Q Okay. He didn't set forth how he did
23 his digestion in the paper that you rely on such
24 that it would be of publishable quality, did he?

25 MR. BISHOP: The same objection.

1 A Well, there's a report that, you know,
2 for a publication you would just put in the actual
3 methodology or refer to the paper the way it was
4 done and so forth.

5 Q Someone who came along to read that
6 and wanted to rely on it would have to say "This
7 isn't reliable enough because I don't know what he
8 did," true?

9 A Well --

10 MR. BISHOP: Objection. Calls for
11 speculation.

12 A I know Professor Pooley, we work
13 together, we've had an association going back now
14 for 30 years. As far as I'm concerned, he's the
15 best mineralogist in this field. He's pioneered a
16 lot of the methodology. He's made a substantial
17 number of important observations over the years and
18 I have no doubts as to his competence in examining
19 this.

20 Q Okay.

21 A Examining these materials.

22 Q Nonetheless, he didn't set forth his
23 methodology in the paper so that people who were
24 relying on it like yourself know what he did, true?

25 A I think if people were in the field,

1 in this particular field, they would know Professor
2 Pooley, they would know of his work, they'd know of
3 his methodology, it's not a big secret.

4 Q Okay. So you just trust him, fair?

5 A Yeah.

6 Q You'll -- because he said it's so,
7 you'll accept it even though he didn't set it out in
8 a scientific manner?

9 A It's not quite as --

10 MR. BISHOP: Objection. I think that
11 mischaracterizes the testimony. He just --

12 MR. HARTLEY: That's good enough.

13 We've got your objection.

14 A That's a rather simplistic way of
15 putting it. You know, you work with somebody, you
16 either respect them or you don't. You develop that
17 respect over years. You followed it where there's
18 inter-laboratory comparisons between what he finds
19 and what other people find doing similar methodology
20 in other labs match, then there's no reason to doubt
21 there's a problem. And in terms of characterizing
22 specific types of fibers, he is one of the best at
23 it.

24 Q Okay. There is no similar study out
25 there that you can identify for us where someone did

1 what Dr. Pooley purports to have done in that
2 litigation report for the law firm, Henry Garrard's
3 law firm, is there?

4 A Not to my knowledge.

5 Q So you can't compare his results in
6 that, in that paper that he did for the lawyers to
7 some other study so that you can say his results are
8 similar, so I'm going to rely on him, can you?

9 A Well, I, I -- we go to the negative in
10 a way. I've not seen any papers where they have
11 looked at Calidria asbestos and said "Whoa, there's
12 tremolite there."

13 Q Right. And because people aren't
14 studying that except for when Union Carbide is
15 paying for it, isn't that true?

16 A Well, people have a lot of
17 opportunities to study these things. You know,
18 Calidria has been used experimentally, there was an
19 opportunity to examine it, nobody has said that
20 there is tremolite in it.

21 Q Coleman says that there's tremolite in
22 the area, right?

23 A The area --

24 MR. BISHOP: Objection to the form.

25 Mischaracterizes what he said.

1 A In the area around, not in.

2 Q Coleman doesn't indicate that he
3 assayed the mine area, does he?

4 A No.

5 Q He indicates that he's just aware of
6 tremolite around the mine, right?

7 MR. BISHOP: Objection.

8 Mischaracterizes the testimony and the
9 statement.

10 A I'd like to see the exact statement of
11 what he said.

12 Q Well, we can look at it.

13 A Sure.

14 Q Do you have -- did you bring it today?

15 THE WITNESS: Do you have the cohort?

16 MR. BISHOP: What's the number?

17 MR. HARTLEY: Yeah, I'll give it to
18 you. We need to take a break anyway.

19 THE VIDEOGRAPHER: Going off the
20 record. The time is 12:22 p.m. This is the
21 end of tape two.

22 (Whereupon, off the record.)

23 (Whereupon, lunch recess.)

24 (Objections to Plaintiffs' Discovery

25 Deposition Notice of Allen Gibbs, M.D. marked

1 as Exhibit 6, as of this date.)

2 (Cross-Notice of Taking Discovery
3 Deposition marked as Exhibit 7, as of this
4 date.)

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A F T E R N O O N S E S S I O N

(Whereupon, resumed.)

THE VIDEOGRAPHER: We're back on the record. The time is 12:44 p.m. This is the beginning of tape three.

MR. HARTLEY: Is it okay we separate them so we can work off them?

MR. BISHOP: Sure.

BY MR. HARTLEY:

Q Let me ask you first. There's a -- this is a copy of one of the documents that we've been referencing, it's the Pooley report --

A Yeah.

Q -- done for the Garrard Blasingame firm, right?

A Yeah.

Q Okay. And at the back there's this sort of random photocopy photo of something, is that important to the report?

A Not to me.

Q No? Okay.

A Yeah.

Q Because there are two copies of it here and one doesn't have that photo, so I was just, so what we're going to do is we're going to separate

1 them so that we can talk about them together.

2 A Okay.

3 Q Now, there's some, there are some tabs
4 that you've identified or that are on there, did you
5 put those tabs on that document?

6 A No. No.

7 Q Did Mr. Bishop do that?

8 MR. BISHOP: I just put them on there
9 a second ago, he doesn't know why they're on
10 there and had no part of it.

11 MR. HARTLEY: Okay.

12 MR. BISHOP: It's just for my own
13 edification for later on.

14 MR. HARTLEY: Okay.

15 MR. BISHOP: So if you want to show
16 him the one without the tabs, that's fine.

17 MR. HARTLEY: No, no, I don't care, I
18 just wanted to ask him --

19 MR. BISHOP: Sure.

20 MR. HARTLEY: -- if it was his work
21 product or yours.

22 A Do you want to go back to the
23 Coleman --

24 Q Sure.

25 A -- article?

1 Q Sure. Isn't it true that Dr. Coleman
2 identifies that there's a minor amount of tremolite
3 on the tectonic inclusions in the area where
4 Calidria is mined?

5 A Well, what he says is that a very
6 minor amount of tremolite is present along the
7 boundaries of some of the tectonic inclusions within
8 the New Idria Serpentinite, but it is important to
9 note that no amphibole asbestos has been reported in
10 any of the mineralogical studies made of the New
11 Idria asbestos deposits.

12 Q Right. And he doesn't -- and those
13 would be what, those studies that we're talking
14 about where there's a report?

15 A I don't -- he's referenced some
16 previous things but nothing actually specifically to
17 New Idria.

18 Q Who --

19 A What he said --

20 Q Who does he reference?

21 A There's an article Mumpton and
22 Thompson; Campbell 1978; Wicks and O'Hanley 1988.

23 Q Okay. So Mumpton and Thompson were
24 Union Carbide employees, right?

25 A I don't know.

1 Q They were, because they were the ones
2 who helped discover and map out the ore body, true?

3 A Yes.

4 Q Okay. And you know that they were
5 actually employed by Union Carbide, don't you?

6 A I didn't know that, but it wouldn't
7 surprise me if they were if they -- as they mapped
8 it out.

9 Q C.S. Thompson was the Thompson of
10 Mumpton and Thompson, right?

11 A Yes.

12 Q He's the gentleman who went from
13 working at Union Carbide to working for
14 R.T. Vanderbilt, true? Slim Thompson?

15 A I don't know.

16 Q Okay. At the time -- let me ask you:
17 Isn't it true that the same thing could be said for
18 Canadian mines, too, that minor amounts of tremolite
19 are found around the mines?

20 MR. BISHOP: Objection:

21 Mischaracteri -- mischaracterizes.

22 A Well, I think you have to take the
23 Calidria on the one hand and separate it from the
24 Canadian mines there. In Quebec there were, there
25 was more than one mine.

1 Q Right.

2 A There were different mines that showed
3 different levels of contamination by tremolite.

4 Q Okay. Now, you would certainly
5 characterize the amount of tremolite in Canadian
6 chrysotile as very minor, wouldn't you?

7 A In percentage terms but of major
8 biological significance.

9 Q I've never found anybody who can
10 answer this question for me and I want to see if you
11 can: How much tremolite was in Canadian chrysotile?
12 By percentage or any way you can answer it.

13 A What do you mean by Canadian
14 chrysotile? Do you mean Canadian chrysotile from
15 asbestos, from Thetford, you know, any specific
16 mine?

17 Q Well, let's try Thetford first.

18 A Well, mines -- well, again, there were
19 different mines within Thetford. There were
20 so-called central mines and peripheral mines. The
21 amount of contamination appears to be greater in the
22 central mines than the peripheral mine. I can't
23 give you chapter and verse on each individual mine
24 within that group but it's probably of a couple of
25 percent in that area.

1 Q Okay. Where did you get the couple of
2 percent?

3 A I think I've read articles, I can't
4 specifically say that was the article that said
5 that.

6 Q So the -- and the percentage was based
7 on milled chrysotile?

8 A I think it was in the chrysotile ore.

9 Q So 2 percent of the weight of the ore
10 that was coming out of the mine was tremolite?

11 A I think, I think it was if you took
12 the asbestos content of the ore.

13 Q Okay. So 2 percent of the asbestos
14 that was coming out of the ore?

15 A That's my understanding.

16 Q And the only way to know that would be
17 to mill it because then you'd only, that's how you
18 separate the ore from the -- the non-asbestos from
19 the asbestos in the ore, true?

20 A Well, in that situation, yes.

21 Q Okay. Now, isn't it true that the
22 predominant information about the presence or
23 absence of tremolite in the mining regions in Canada
24 comes from air monitoring around the mines?

25 A I thought there has been geological

1 surveys as well but I can't give you the precise
2 information on that.

3 Q The air monitoring around the mines is
4 where is the information that's available about the
5 dose of tremolite that workers were inhaling in
6 those central and peripheral mines, true?

7 A Yes, I don't think that the, they had
8 monitoring data actually measured tremolite as such.
9 I think it measured in terms of just fibers longer
10 than 5 microns. But there are tissue burden studies
11 of Canadian miners.

12 Q Tissue burden studies would not be a
13 good surrogate for identifying the content of the
14 ore itself, would they?

15 A It would be a good set for assessing
16 what the person was exposed to in terms of
17 amphibole.

18 Q There's a wide variation in the
19 published peer reviewed literature about the
20 biopersistence of various types of asbestos fibers,
21 true?

22 MR. BISHOP: I'm sorry, what do you
23 mean by wide variation, different types of?

24 MR. HARTLEY: Timing. Time for.

25 Q Like some authors say biopersistence

1 is longer than others for various asbestos fibers,
2 true?

3 A Well, in terms -- you have to go fiber
4 by fiber. If you're talking about amosite, I think
5 the general agreement is the half life is about 20
6 years, there may be some say 18, some 20, you know,
7 but the general feeling is around 20 years. For
8 crocidolite it's been estimated that they're around
9 about eight years. For chrysotile is within weeks
10 or months.

11 Q Okay. So you're telling me, to --
12 well, there are authors who have identified the
13 biopersistence of chrysotile as much longer than
14 months, true?

15 A There have been studies, for example,
16 the Playtex study of the animals that suggested
17 chrysotile fibers can stay quite a long time, but it
18 only seems to apply to a small percentage of fibers.

19 Q And when we talk about biopersistence,
20 it's important to talk about what tissue the
21 biopersistence is that is being discussed, true?

22 A Well, what you're trying to do is to
23 assess what is the dose likely. Now if you're
24 trying to separate lung from pleura, there's not a
25 lot of point in doing that, the studies have been

1 done on the lung.

2 Q Right. There are lots of studies of
3 lung, lung biopersistence for asbestos fibers and
4 not very many for the pleura, true?

5 A Correct.

6 Q Pleura, we would both agree, is where
7 mesothelioma occurs in humans, one of the places
8 anyway?

9 A Yes.

10 Q Peritoneum is another one?

11 A Yes.

12 Q The asbestos fibers to cause, to cause
13 mesothelioma, be they some sorts of amphiboles in
14 your mind, have to get to that tissue, true?

15 A Well, they either have to get to that
16 tissue or close and I think the pleura is extremely
17 close to the periphery of the lung. So there have
18 been studies that actually show that if you do some
19 intratracheal experiments and you put asbestos into
20 the trachea, you can get various growth factors
21 appearing in the pleural fluid with no fibers there.
22 So the asbestos can stimulate a number of different
23 things in terms of growth factors, et cetera, and it
24 doesn't actually have to be in the immediate
25 territory of that particular cell, they can diffuse

1 over, you know, quite a distance in the lung.

2 Q I'm presuming that you're telling me
3 that very close means that they touch the
4 mesothelial cells from --

5 A No, I'm not sure they need to actually
6 touch the mesothelial cells, they have to be in
7 sufficient proximity to have cells releasing various
8 factors that cause a stimulation in those
9 mesothelial cells. It may not be a direct effect of
10 the asbestos itself. I don't think it's actually
11 shown in the literature exactly what happens.

12 Q Okay. So the literature is
13 inconclusive as to whether asbestos needs to get to
14 the pleura to cause mesothelioma?

15 A Well, the general --

16 Q In your mind.

17 A -- the general opinion is that
18 asbestos either needs to get to the pleura or very
19 close to the pleura to cause pleural disease.

20 Q Okay. I've heard the part about get
21 to the pleura, where is the, what is the literature
22 that says very close?

23 A Well, as I say, you've got experiments
24 that can show that these growth factors and things
25 can diffuse over quite a distance. If you find

1 asbestos that interacts with a number of different
2 cells, epithelial cells, mesothelial cells,
3 macrophages, stromal cells, it's a very, very
4 complex thing that's going on with release of
5 various factors that stimulate growth, others
6 inhibit, and that sometimes the balance goes wrong.
7 So it would suggest that the asbestos fibers have to
8 be in the vicinity, whether they have to touch the
9 cell I think is not shown.

10 Q The data that you're talking about
11 when you're talking about close to or proximity but
12 not touching, what studies are you talking about?

13 A Well, if you go to the Mossman whole
14 group of articles, it shows the sort of chemical
15 milieu that can occur following asbestos fibers
16 locating in lung and in pleura. And the problem
17 with these, these are sequential studies, you kind
18 of actually follow over a period of time where
19 exactly the fiber is and what's being produced
20 around it. You're looking at snapshots of time.

21 Q So if I read, if I went to the body
22 of -- you're talking about Brooke Mossman?

23 A Yes.

24 Q The University of Vermont?

25 A Yes.

1 Q If I went to her work, you believe I
2 would find something in the abstracts that suggest,
3 that said that asbestos fibers don't need to touch
4 the tissue --

5 A I don't think she would --

6 Q -- to cause disease?

7 A I don't think she'd use that
8 phraseology.

9 Q Something that would paraphrase to
10 that being I'm not a scientist?

11 A I think what she does is describe the
12 events that asbestos has on certain types of cells.

13 Q Is it fair to say that you --

14 A And not all the effects of on these
15 cells are direct, from a direct interaction between
16 the fiber and the cell itself, it could be that it's
17 another cell that's producing something that's
18 affecting another cell.

19 Q Is it fair to say that you don't feel
20 comfortable in telling me to a reasonable degree of
21 scientific certainty that asbestos fibers do not
22 have to get to the pleura, that they, that they only
23 need to get close, you're not sure, is that what --

24 A I'm not sure exactly, yeah.

25 Q Okay. So as far as you're concerned,

1 that's still an open scientific question where you
2 would need more data to render a reliable expert
3 opinion about, other than to say that there's a
4 question?

5 A Yes.

6 Q Okay. Fair enough.

7 Turning to Dr. Pooley, his visit, he
8 went to the, he went to the mine with H.G. Garrard,
9 that's Henry Garrard, right?

10 A I mean I know he went to the mine, I
11 don't know how he went to the mine.

12 Q It says, it says on the, on the page
13 under, under the Introduction, the next paragraph,
14 the next section it says Collection Of Samples And
15 Observations Of The Mine And Processing Plant.

16 A I'm sorry, which page?

17 Q Under the Introduction you see if you
18 go below, there's a heading down below, the first
19 sentence it says "In October 1991," do you see that?

20 A Yeah, okay.

21 Q Is it, is it typical scientific
22 practice to take a lawyer with you to do
23 experiments?

24 A I don't think Professor Pooley was
25 taking the lawyer, I think the lawyer was

1 accompanying him.

2 Q Oh, so do you think the lawyer was
3 taking Professor Pooley?

4 A No, I think Professor Pooley is quite
5 capable of finding the mine but probably it was felt
6 to be reasonable and quicker for him to be shown
7 where it was.

8 Q Okay. Getting back to my question.
9 It's not normal for you to have lawyers present when
10 you perform scientific studies, is it?

11 A Not usually.

12 MR. BISHOP: Object to the term
13 normal.

14 A No.

15 Q Have you ever had a lawyer present
16 when performed a scientific study?

17 A No.

18 Q You've never needed legal advice to do
19 that, to perform a scientific study?

20 A No. We have to deal with various
21 ethical measures but they're done locally.

22 Q Okay. There are several pages of
23 discussions of the visit and the samples, true?

24 A Yeah.

25 Q The methodology used, the chemical

1 distillation I guess I'll call it, is that a fair
2 assessment of what he did?

3 A Yep.

4 Q There's no citations for that
5 methodology, right, like that I'm relying on
6 somebody's method to do this that's been established
7 and tested in the scientific literature?

8 A (Reviews.)

9 It doesn't specifically refer to a
10 reference.

11 Q That would be one thing you'd want to
12 see in a paper where someone's using a methodology
13 that you're not familiar with that's non-standard,
14 some sort of validation of that method, true?

15 A Well, I think it stems from the, I
16 think the studies that were done in Edinburgh where
17 they looked at bulk samples of asbestos fibers and
18 found it useful to do a sort of chemical
19 manipulation to get rid of the chrysotile. I think
20 the person who did that was Addison in Edinburgh and
21 I think this is, probably was based on that.

22 MR. HARTLEY: Objection:

23 Nonresponsive.

24 BY MR. HARTLEY:

25 Q There's no reference and that's

1 something that you'd want to see in a new
2 methodology that you're not familiar with, a
3 validation of it, true?

4 MR. BISHOP: Objection. Vague and
5 ambiguous.

6 A I don't think I need to see the
7 specific method of that.

8 Q Okay. You're just willing to, despite
9 the fact that you're not familiar with this
10 procedure, it's not one that you performed, you just
11 trust Dr. Pooley to do it and that it's valid?

12 MR. BISHOP: Objection.
13 Mischaracterizes the testimony.

14 A I don't do these tests, it's Professor
15 Pooley that does these tests.

16 Q Right. And Professor Pooley didn't
17 provide you any reference so you could know the
18 methodology he's using is reliable, true?

19 MR. BISHOP: The same objection.

20 A In this specific report it doesn't say
21 but I know he's done studies in this area about
22 preparation techniques for asbestos fibers that are
23 well published.

24 Q Okay. And you know that it's
25 important when you're looking at scientific work and

1 relying on it to be able to have reasons other than
2 being familiar with the scientist to rely on what
3 they write, true?

4 MR. BISHOP: The same objection.

5 Can whoever's on the phone put their
6 phone on mute, please? Thanks.

7 A It's based on the actual paper itself
8 what it says, does, is there anything in that paper
9 that would suggest that it was irregular in any
10 fashion, and I don't see that, and knowing that it's
11 a report, it is not a peer reviewed paper, this is a
12 report.

13 Q Right.

14 A And they're not done in the same way
15 generally as a peer reviewed paper. I think the
16 message is quite clear there.

17 Q I agree the message is clear, the
18 question that I'm having is, is it reliable that
19 message?

20 A I think that message is reliable.

21 Q And now I'm trying to explore why you
22 think so since there's no, since -- let me ask you:
23 Is -- let me ask you this question: Is the
24 information and the methodology set out in that
25 report that you're relying on within your area of

1 expertise?

2 A I'm not an expert on selected area of
3 electron defraction and the actual specific analysis
4 of fibers, that's my colleague does that. What I
5 would say is that in terms of looking at papers in
6 this field the procedures seem to be fairly standard
7 in terms of the actual analysis from the energy
8 dispersive X-ray analysis point of view and the
9 electron defraction studies and that this chemical
10 treatment has been used to look at samples and found
11 amphibole fibers in some samples of chrysotile which
12 weren't suspected to be there.

13 MR. HARTLEY: Objection to the
14 nonresponsive portion.

15 BY MR. HARTLEY:

16 Q You are not an expert in the
17 methodology that's set forth in the Pooley report to
18 Garrard Blasingame law firm, right?

19 A Correct.

20 Q There is nothing in that paper that
21 indicates to you that the methodology described i
22 scientifically valid, is there?

23 MR. BISHOP: Objection:
24 Mischaracterizes the testimony.

25 A There's nothing in there that suggests

1 it's scientifically flawed which I think is more the
2 important thing.

3 Q You will rely on unvalidated opinions
4 because, or methodologies because you trust
5 Dr. Pooley, is that what you're telling me?

6 MR. BISHOP: Object to the term
7 unvalidated.

8 A What I would say is that Professor
9 Pooley has an enormous experience of looking at
10 samples, geological samples, product samples. His
11 results have been compared with other people's and
12 they always are reproducible. The same goes for the
13 tissue burden studies of which he pioneered the
14 technique to a large extent. So I have no reason to
15 question his ability or his integrity.

16 Q And conversely, he didn't provide any
17 sources of citation that he is relying on the work
18 of any other scientist to support that opinion,
19 true?

20 A Well, this is a report, it's not, it's
21 not a published paper.

22 Q Right.

23 A I'm sure he could, if you asked him,
24 he could provide citations.

25 Q I know, I'm sure you believe that.

1 The question is somewhat different.

2 You understand that he doesn't cite to
3 anything, any published peer reviewed works, true?

4 A No, he describes what he did.

5 Q Okay.

6 A So he wasn't referencing the
7 techniques because the techniques generally are
8 standard.

9 Q If that technique were standard, it
10 would have made sense to cite to the standard
11 technique in it, correct?

12 MR. BISHOP: Objection. Calls for
13 speculation.

14 A It's a report, it's not a scientific
15 paper --

16 Q Okay.

17 A -- so you wouldn't do a report in the
18 same way as you do a scientific paper.

19 Q Dr. Pooley is the kind of person if he
20 were relying on the Addison-Davies method, he would
21 have cited to it, wouldn't he?

22 MR. BISHOP: Objection. Calls for
23 speculation.

24 A I don't think necessarily he would
25 have if he just modified that technique in some way.

1 Q Do you believe that he modified the
2 technique then?

3 A I suspect he did modify the technique.

4 Q And you don't know the effects of that
5 modification on that published peer reviewed work by
6 Addison and Davies, the modifications that
7 Dr. Pooley made to that technique that you think he
8 might have been using, true?

9 MR. BISHOP: Same objections.

10 A I don't know of the precise comparison
11 with the Addison technique but I think it's just a
12 variation of it.

13 Q You think so because you know that's
14 the case, right, that it's a variation on the
15 Addison technique?

16 A I believe that to be the case.

17 Q Why do you believe that?

18 A I think we probably discussed various
19 things over the past, not specifically this, but I
20 meet Fred Pooley once a week and we discuss things
21 generally, papers, research we're involved with, et
22 cetera.

23 Q So what we know then is from, you know
24 from your discussions with Fred Pooley is that the
25 technique that he used to create that paper is not

1 the Addison-Davies technique, it's his own
2 technique, true?

3 A Well, I think it, I think it was
4 probably based on the Addison technique but refined.

5 Q Right. And so unlike the
6 Addison-Davies technique, which has been subjected
7 to peer review, Dr. Pooley's technique here has not,
8 true?

9 A Correct.

10 Q You aren't qualified to peer review
11 it, true?

12 A Correct.

13 Q So you are not qualified to say
14 whether it's reliable there or not, are you?

15 MR. BISHOP: Same objection.

16 A In terms of could I write out an
17 affidavit and say it was absolutely correct, no, but
18 my opinion is based on what I regard as valid data.

19 Q What valid data are you basing your
20 opinion on since you're not qualified to, by your
21 own admission, to critique that methodology?

22 A I'm looking at a person who's worked
23 in this field for a long time who knows what he's
24 doing in terms of bulk samples and knows what he's
25 doing in tissue samples, whose work has been, whose

1 methodologies have been published in the literature
2 and also adopted by the WHO as the preferred method
3 for looking at tissues, for example. I don't have
4 any reason to doubt the validity of this.

5 Q You're not suggesting that the
6 methodology that's set forth here dealing with
7 distilling or dissolving away the chrysotile to look
8 for amphiboles as set forth in this report is the
9 methodology used by the World Health Organization,
10 are you?

11 A No, but the WHO report is not about
12 that, the WHO is about how do you quantify tissue
13 samples of asbestos fibers.

14 Q So --

15 A This is for a different purpose. This
16 is to look to see is there any amphibole in this
17 particular chrysotile sample or samples.

18 Q Given your lack of expertise in the
19 methodology set forth in Dr. Pooley's report, is it
20 fair to say that the main reason that you're relying
21 on that report is because you trust Dr. Pooley?

22 MR. BISHOP: Objection.

23 A To a large extent, yes.

24 Q It's not on scientific grounds that
25 you can, that you can articulate for me, right?

1 A Well, it is on science --

2 MR. BISHOP: Objection:

3 Mischaracterizes his testimony.

4 Go ahead.

5 A It's on scientific grounds insofar as
6 Fred Pooley has published at least a hundred,
7 probably 200 papers on looking at minerals in
8 samples, tissues, peer reviewed, who's an
9 acknowledged world expert in the field.

10 Q That's the sum total of your trust of
11 him and --

12 A Well --

13 Q -- his other works, that's why you
14 rely on this methodology?

15 A Well, looking at this, it doesn't look
16 any different in broad terms using the techniques,
17 electron microscopy, high magnification, energy
18 dispersive X-ray analysis, adding electron
19 defraction, doing the manipulation to see after
20 having looked at the samples first for chrysotile --
21 amphibole fibers in the chrysotile to a more
22 sensitive technique for picking out very small
23 contaminants, it looks similar to what other people
24 have done when they've been trying to do it.

25 Q To your untrained eye as a non-expert

1 in the field that's being discussed in that report?

2 A Well --

3 MR. BISHOP: Objection:

4 Mischaracterization.

5 Go ahead.

6 Q True? Is that fair?

7 A Yes, but whenever you do a study, you
8 rely on other people to a certain extent. I mean
9 epidemiologists rely on pathologists to make a
10 diagnosis of mesothelioma. It's not the
11 epidemiologists who make the diagnosis.

12 Q That's true. And most epidemiologist
13 studies are then subjected to the peer review
14 process, true?

15 A Yes.

16 Q Unlike this litigation report, true?

17 A This is a report, it's not a paper.

18 Q Right, it's untested, it hasn't been
19 subjected to peer review, true?

20 A It hasn't been subjected to peer
21 review as far as I know.

22 Q So no one, as far as you know, with
23 the expertise of in the areas that Dr. Pooley is
24 describing has looked at that paper to see whether
25 his methodology is valid, true?

1 A I don't know who's looked at the paper
2 altogether.

3 Q Whereas with other methodologies that
4 you might rely on things, for instance, what
5 Dr. Pooley has published in the peer reviewed
6 literature, you have a reason to rely on it because
7 people with the qualifications and the expertise to
8 peer review that document purportedly have done so,
9 true?

10 MR. BISHOP: Objection.

11 Mischaracterizes his testimony.

12 A Yes. I have never seen any document
13 in the peer reviewed literature that actually
14 counteracts this, these findings on Calidria.

15 Q Right. The absence of evidence is not
16 evidence of absence, true?

17 A I would suspect, and I don't know that
18 people have looked at this and found the same thing
19 and it hasn't been published.

20 Q Okay. You're not going to testify
21 based on suspicions, are you?

22 A No, no.

23 Q Okay.

24 A But you're asking me a general
25 question about it and the validity of it --

1 Q Right.

2 A -- and I'm just giving you my opinion
3 of it.

4 Q Wouldn't you agree with me that the
5 best way to find out if Calidria causes mesothelioma
6 would be to perform an epidemiologic study of people
7 exposed to Calidria, primarily to Calidria?

8 A Yes.

9 Q That hasn't been done, has it?

10 A Not to my knowledge.

11 Q Who would be in the best position to
12 do that study?

13 A I don't know who would be in the best
14 position to do that study, you'd need a good
15 epidemiologist with a team with substantial funding.

16 Q Right. Union Carbide would be a
17 possible source of substantial funding for that,
18 wouldn't they?

19 A Yes, but you would criticize that
20 study because it was funded by Union Carbide, so,
21 you know, it's Catch 22.

22 Q Well, the study doesn't exist, does
23 it?

24 A You know, you've got an opportunity
25 I'm sure with all the money that lawyers make in the

1 plaintiffs' side to fund the epidemiological study.

2 MR. HARTLEY: Objection.

3 Nonresponsive.

4 BY MR. HARTLEY:

5 Q The -- Union Carbide would be the
6 only, only people who would know who was exposed in
7 their worker population to Calidria, true?

8 MR. BISHOP: Objection. Calls for
9 speculation.

10 A I don't know.

11 Q Okay. They'd be, they'd certainly be
12 one person who would know, true?

13 A I don't think it's quite correct to
14 call them one person, is it?

15 Q That's a legal, it's a legal fact that
16 Union Carbide is a person here in the United States.

17 A Is that right?

18 Q Yeah.

19 A That's interesting. I learned
20 something today.

21 Q You did.

22 A They presumably have the factory
23 records. I think the factory was privatized, I
24 don't know whether the occupational records went
25 with the privatization of the factory or not, or it

1 was taken over by the workers there I think.

2 Q Does the fact that there's no study of
3 workers from a particular plant mean that you could
4 say oh, that doesn't, that substance doesn't cause
5 mesothelioma or something like that?

6 MR. BISHOP: Objection.

7 A You can say that but if there would
8 have been a hot spot of mesothelioma there, I think
9 people would have been alerted to it, and they would
10 have then looked as they have in other places.

11 Q What would a hot spot be, what do you
12 mean?

13 A Well, if you saw several cases of
14 mesothelioma which you could link directly to that
15 and not, and then they weren't in, sort of in,
16 career insulators who worked at the mine or the
17 plant for a year or two, if you could show that
18 there was no other exposure, then that would alert
19 you to that there may be a problem.

20 Q Would it be valid in your mind to just
21 look at the experience of the population in the
22 county where the mine or mill was to see if there
23 was a hot spot and then you'd be able to say oh, no
24 hot spot, no danger from Calidria, would that be
25 valid?

1 MR. BISHOP: Objection. Calls for
2 speculation.

3 A Well, you've always got the problem,
4 as you alluded to earlier, of latency and, you know,
5 how far along do you follow in terms of latency.

6 Q And that people moved from the county
7 where they may have worked at one time, true, that
8 would be a problem?

9 A That could be a problem.

10 Q And there are a whole host of other
11 things such that just looking at the rate of
12 mesothelioma in a population in an area could be
13 misleading, true?

14 A Yes, it could be misleading but you're
15 really looking, if there is a suggestion, I don't
16 know whether all the people from King City migrate
17 every couple of years or what, I don't know what
18 their movements are or whether a lot of them stick
19 around. It is one piece of the jigsaw that you take
20 into account, you don't solely rely on it, you take
21 the totality of the evidence.

22 Q Okay. And then -- and in terms of the
23 Canadian chrysotile miners and millers, how many,
24 how many miners and millers have been looked at over
25 the years?

1 A Well, the study, and I don't know if
2 it includes every miner or miller in Canada because
3 it was, and they were over certain periods of time
4 that they had to work minimum periods, et cetera.
5 It was over 11,000 the study which was the, it had
6 the longest follow-up of any epidemiological study
7 as far as I know.

8 Q And with that 11,000 people how much,
9 how many mesotheliomas were there?

10 A Well, the paper describes 38
11 mesotheliomas but of the 38 my recollection is that
12 five actually worked in a factory there where they
13 used crocidolite.

14 Q Okay. How many people worked at the
15 King City Mill?

16 A I don't recall the precise number.

17 Q If the number were in the range of
18 less than 200, how many mesotheliomas, if the -- if
19 Calidria were as dangerous as working in Canadian
20 miner -- mines and mills, how many people in that
21 group of less than 200 would you expect to have
22 mesothelioma if they were, if Calidria were equally
23 potent to the Canadian chrysotile?

24 A Well, again, it's whether it's you're
25 taking the Canadian as a broad brush, as we've

1 discussed, there's different rates of mesothelioma
2 between Asbestos and Thetford and so forth.

3 Q You wouldn't expect any, would you?

4 A You may or you may not get one.

5 Q You may or you may not but you
6 wouldn't expect any if Canadian chrysotile were
7 equally potent to Calidria?

8 MR. BISHOP: Objection.

9 A If it's 200 subjects, you could end up
10 with no cases.

11 Q In fact, quite easily based on the
12 rates of mesothelioma from the Canadian miller and
13 miner cohorts, true?

14 A Yes, it's possible.

15 Q A single case of mesothelioma in the
16 Calidria miner and miller group would be very
17 significant, wouldn't it?

18 A No. It would depend. If you had
19 good, reliable history that that person wasn't
20 exposed to asbestos elsewhere and also I think you
21 would need lung fiber burden because people have
22 gone down the wrong garden path based on one case.

23 Q Okay. Isn't it true that if Calidria
24 were, if there were, let's say there were less than
25 200 people but I'll give you 200 for purposes of our

1 discussion, that if Calidria were more potent than
2 amosite, let's say as potent as you believe
3 crocidolite is, and you cite to Hodgson and Darnton
4 for that, true?

5 A Yes.

6 Q Okay. So Calidria were 500 times more
7 potent than Canadian chrysotile and it were -- isn't
8 it true that you wouldn't even expect a mesothelioma
9 in 200 people over the life of that, over the life
10 of that cohort?

11 MR. BISHOP: Objection.

12 A I'd have to do them, you know, get a
13 piece of paper and work the maths out on that, I'm
14 not sure about that.

15 Q You know that there's a substantial
16 doubt in your mind that 200 people exposed from 1963
17 through till today there would be, it would be very
18 unlikely, even in a crocidolite cohort for there to
19 be one mesothelioma, let alone more than one which
20 you would find significant, true?

21 A Let me think. They may end up with a
22 negative result.

23 Q Right. So it would, it's entirely
24 possible that looking at the Calidria cohort could,
25 would be completely misleading because you're using

1 a negative to -- the absence of evidence to prove
2 the evidence of absence, isn't that true?

3 MR. BISHOP: Objection. Calls for
4 speculation.

5 A Well, you said what about, why not do
6 an epidemiological study, well, that's maybe one of
7 the reasons why it hasn't been done.

8 Q Okay. Because it wouldn't be reliable
9 to do that, would it?

10 A Well --

11 MR. BISHOP: Object.

12 A -- you have a substantial degree of
13 caution in the interpretation of its results.

14 Q Very substantial, wouldn't you?

15 A Yeah.

16 Q Because 200 people wouldn't be a very
17 large cohort?

18 A No.

19 Q And the only way that you could, you
20 can rely on negative results from an epidemiological
21 study would be if it was massive, true?

22 MR. BISHOP: Objection.

23 A Well, an epidemiological study, no
24 epidemiological study can prove the negative.

25 Q In fact, we don't prove the negative

1 in science, right?

2 A Exactly, you can't do it, but you can
3 say, well, you have these cohorts and they don't
4 show this, it's unlikely.

5 Q You've been involved in several cases
6 for Union Carbide, true?

7 A Yes.

8 Q All of those cases involved alleged
9 exposure to Union Carbide's asbestos?

10 A Yes.

11 Q And most of those cases, if not all of
12 them, were mesotheliomas?

13 A Yes.

14 Q There's evidence there that exposure
15 to asbestos from Union Carbide could cause
16 mesothelioma, true?

17 A No.

18 Q No evidence?

19 A Well, there were mixed exposures, they
20 had other possibilities of exposure.

21 Q And you have figured out a way to
22 separate the influences of various exposures?

23 A Well, I think if you, for example,
24 have a person whose had substantial exposure to
25 asbestos in a shipyard in the fifties and sixties,

1 that's the likely cause.

2 Q What sort of evidence would I need to
3 provide you to convince you that Calidria asbestos,
4 chrysotile asbestos could cause mesothelioma in
5 humans?

6 A I would need a cohort study in which
7 the numbers of mesotheliomas were known and I had
8 the fiber burden data that goes along with that.

9 Q How big would it need to be?

10 A Well, I don't know how big it needs to
11 be, it would depend on what numbers of mesotheliomas
12 you could say were related to Calidria.

13 Q Okay. There is no way, there's no way
14 in the world to create a -- to find a cohort of
15 people who have only been exposed to Calidria,
16 correct?

17 A Well, you could find a cohort that
18 were only exposed to Calidria, I don't know. I mean
19 I don't know the details of the people who worked at
20 King City Plant in terms of what other things they
21 did and when they worked there, et cetera, et
22 cetera, so whether they had any potential other
23 asbestos exposures.

24 Q Assuming that the mill opened in the
25 1960s and there were, there was a boiler there, you

1 would assume, wouldn't you, sir, that there would be
2 thermal insulation, true?

3 A I don't know, probably.

4 Q In the past you have testified that
5 likely sources of exposure to amphibole in people
6 that where there was no direct evidence of it would
7 have been that they were around thermal insulation,
8 isn't that true?

9 A Yes.

10 MR. BISHOP: I'm going to object to
11 the form.

12 BY MR. HARTLEY:

13 Q So if we did a -- if there were an
14 epidemiologic study, that would be a potential
15 confounder in your mind if we studied the King City
16 workers because there's probably some pipe covering
17 there, right?

18 MR. BISHOP: Object. It calls for
19 rank speculation.

20 A That's why I said you would need to
21 fiber burden on the lung tissue.

22 Q Let me ask you about rank speculation.
23 Wouldn't it be rank speculation to rely on the miner
24 and miller group from the Union Carbide facility in
25 California to say that Calidria doesn't cause

1 mesothelioma?

2 MR. BISHOP: Objection. Vague and
3 ambiguous.

4 A I'm sorry, in what context?

5 Q In any context.

6 A I don't know if it's rank speculation,
7 it's not speculation in terms of if you look at the
8 literature on chrysotile itself and then you look at
9 the characteristics of Calidria itself, I don't
10 think it's rank speculation.

11 Q There are a large number of scientists
12 who take a different point of view from you about
13 whether chrysotile in general can cause
14 mesothelioma, true?

15 A There's some people who take a
16 different view.

17 Q You saw that the ATSDR as of 2001
18 wrote anyway in their document that all types of
19 fibers can cause mesothelioma, true?

20 MR. BISHOP: Objection. I think
21 that's again where you mischaracterize
22 because you pointed out that at the end one
23 of the unresolved items was the impact of
24 tremolite versus chrysotile.

25

1 BY MR. HARTLEY:

2 Q We did read together, didn't we, that
3 exposure to any asbestos type can increase the
4 likelihood of lung cancer, mesothelioma and
5 non-malignant lung and pleural disorders, didn't we?

6 MR. BISHOP: Same. Same objection.

7 A I did say I would like to see the body
8 of the text because it may say there that they
9 treated chrysotile universally with or without
10 tremolite.

11 Q I don't dispute that.

12 A They didn't separate it out, so, I
13 mean it's just one sentence out of a document.

14 Q There are well-regarded
15 epidemiologists who have published papers indicating
16 that chrysotile causes mesothelioma, true?

17 A Purported to show, yes.

18 Q There's, there's -- you're familiar
19 with the meta-analysis done by Alan Smith, Wright
20 and Smith I think it is?

21 A Am I familiar with it, yes.

22 Q Okay. It's a meta-analysis, right?

23 A Well, it's, as you say, if you put
24 garbage in, you get garbage out and he very --

25 Q Yes is a good answer here.

1 A He put a lot of garbage in.

2 Q Right.

3 A So he mischaracterizes the groups, the
4 cohorts.

5 Q So what you, what you see there from
6 your own, as your opinions are, you're very
7 passionate about that, right, you seem to be --

8 A Well, I think it's very misleading to
9 put in mesothelioma is related to chrysotile when
10 the paper that he came from specifically pointed out
11 in the paper that the workers were exposed to
12 crocidolite early on in the work and yet it goes
13 down in that paper as a chrysotile-induced
14 mesothelioma. There's all sorts of
15 mischaracterizations like that. And also when the
16 cohort is negative for mesothelioma, low and behold
17 he drops it out, he doesn't put it in.

18 Q That's a danger in the meta-analysis,
19 isn't it?

20 A Well, this is not, it's not one
21 isolated thing, you can actually go through the
22 whole paper and it's wrong in so many respects.

23 Q Right.

24 A And I don't know who peer reviewed it
25 because they did not make a good job of it.

1 Q Okay. You would have done, you would
2 have been more critical in a peer review?

3 A Yes.

4 Q Okay. You haven't peer reviewed
5 Hodgson and Darnton, have you?

6 A No, I wasn't asked to.

7 Q And you haven't -- were you ever asked
8 other than by lawyers to peer review Smith's
9 article?

10 A I didn't peer review Smith's article,
11 and I don't really want to say which articles I peer
12 reviewed anyway because I think that's confidential.

13 Q All I want to know is about Smith's.

14 A I have not peer reviewed Smith.

15 Q So it was in your work in litigation
16 where you got to form these opinions --

17 A No, I --

18 Q Let me finish my sentence and then you
19 can say what you have to say.

20 A Okay.

21 Q You understand that I'm asking you
22 questions, right?

23 A Sure.

24 Q And you're going to answer them to the
25 best of your abilities, right?

1 A Yes.

2 Q Okay. And we have to wait so that we
3 don't talk over one another, true?

4 A Okay.

5 Q Fair enough?

6 A Yeah.

7 Q Because you don't know what I'm going
8 to say, do you?

9 A I was just -- I thought it was the
10 first sentence, I didn't realize we were going to
11 have a 16-sentence question.

12 Q Okay. You came to, you came to form
13 these opinions about Dr. Smith's paper, the
14 meta-analysis that's entitled Chrysotile Is The Main
15 Cause Of Mesothelioma, in litigation, true?

16 A No, I read this paper anyway.

17 Q Okay.

18 A As part of my reading.

19 Q Okay. And you had this strong
20 reaction to it, I take it, at that time?

21 A Yes.

22 Q And did you submit a letter to the
23 editor criticizing it?

24 A No, because it was, I think it was six
25 or nine months after it came out that I actually

1 read it.

2 Q You were not with your -- you seem
3 very concerned about the quality of that paper and
4 you didn't want to set the record straight?

5 A I thought that six or nine months down
6 the line by the time I put the letter together and
7 it went off it would be probably a year that had
8 elapsed which is probably not, is too long generally
9 to criticize, to critique a paper.

10 Q Okay. As far as you're concerned,
11 that's proof positive that statistics can be
12 manipulated to come up with a result, true?

13 A I don't like to use the word
14 manipulation, I just think that there was a lot of
15 mischaracterization of exposures in that paper,
16 whether it was deliberate or accidental I don't
17 know. It was a poor piece of research work.

18 Q Right. Okay. And mischaracterizing
19 exposures can be very important in a meta-analysis,
20 right?

21 A Yes.

22 Q Similarly, mischaracterizing exposures
23 in Hodgson and Darnton's meta-analysis can be very
24 important to the results of that, true?

25 A Yes.

1 Q We've agreed, haven't we, that the
2 dose data that went into Hodgson and Darnton's work
3 had a great deal of variability and indeed
4 unreliability, true?

5 MR. BISHOP: Objection.

6 A Well, I think, I think the authors
7 themselves point out where the problems are and they
8 fully discuss that, I don't think they're trying to
9 conceal that or mislead.

10 Q I'm not suggesting that they do try to
11 conceal it or mislead people, I'm asking you: You
12 would agree with me that what you review in Hodgson
13 and Darnton says that their dose data is unreliable,
14 wouldn't you?

15 A Well, they were making --

16 MR. BISHOP: Objection:

17 Mischaracterizes.

18 A They were making their best estimates.

19 Q Right. In fact, one person, one of
20 the, one of the people who gave them the dose data
21 called it a guesstimate, didn't they?

22 A I don't know, I can't remember that
23 precise word.

24 Q If it's in the paper, you won't
25 dispute it, right?

1 A I wouldn't dispute it, no.

2 Q You don't, you don't base your
3 scientific opinions on guesstimates, do you?

4 A Generally no.

5 Q Guesstimates aren't the kinds of
6 things that you would testify about in a court of
7 law under oath?

8 A No.

9 Q Now, Hodgson and Darnton in their
10 paper say that there's no basis given all the
11 information that they reviewed for finding a
12 threshold for the causation of mesothelioma due to
13 asbestos exposure, true?

14 A Yes, that's what they say.

15 Q They don't say in their paper anywhere
16 that chrysotile does not cause mesothelioma, do
17 they?

18 A They actually point out in the paper
19 that they haven't separated the chrysotile from the
20 chrysotile-tremolite issue.

21 Q Right. So the answer to my question
22 is they don't say in their paper that chrysotile is
23 not potent for mesothelioma, right?

24 A They did, they did not say pure
25 chrysotile was not potent, no.

1 Q Right. The very fact that they're
2 comparing the potencies of the fibers even in
3 discussion indicates if something has a potency of
4 one, that means it does cause the disease, true?

5 A Yes, the one is, but that was based on
6 the chrysotile cohort that had tremolite.

7 Q Okay. The Hodgson and Darnton also
8 talk about some of the work that was done to
9 identify a threshold through animals, right?

10 A Yes.

11 Q They talk about Ilgren and Brown's
12 work on that topic, true?

13 A Yes.

14 Q That's the same Ilgren who wrote the
15 Calidria papers that you rely on, right?

16 A Yes.

17 Q Ilgren -- Hodgson and Darnton say that
18 Ilgren and Brown's threshold based on animal data is
19 logical nonsense, true?

20 A That's what they said.

21 Q And that also would give you some
22 concerns about -- well, first, you agree that it's
23 logical nonsense the paper that Ilgren and Brown
24 wrote that purports to identify a threshold for
25 mesothelioma through animal data, true?

1 A I think it was just an attempt to try
2 and find where the threshold was.

3 Q And it was a logically nonsensical
4 one?

5 A It's not, it's not a phrase I would
6 use.

7 Q You don't, it doesn't give, that
8 statement in a published peer reviewed paper by
9 people who are looking at the specific question
10 doesn't make you think more highly of Ilgren and
11 Brown for writing that, though, correct?

12 A No.

13 Q I mean the fact that it got through
14 the peer review process means that it's -- that
15 people weren't that concerned about it to change the
16 language, true?

17 A Correct, yeah.

18 Q You wouldn't support, you wouldn't use
19 Ilgren and Brown's work identifying a threshold
20 through animal data in a court of law, would you?

21 A Well, I think sometimes you're asked
22 the question where the threshold lies, and if you're
23 going to do that, you have to in extent use the
24 Ilgren-Brown data.

25 Q You would, you would offer an opinion

1 in court that is not -- that is supported by a
2 methodology that you don't believe is sound?

3 A Well, you --

4 MR. BISHOP: Objection.

5 Mischaracterizes the testimony.

6 A It depends, you know, what the
7 question is. If I'm asked to give -- you said to me
8 today, you asked me questions, I should wait for you
9 to ask the questions, I should respond in the best
10 way I can in, in what I know, and to some of the
11 questions there's no absolute answer because there's
12 not the 50 parameters that you would like satisfied
13 to make a precise answer to the question. But, if
14 you ask a question where there's little data, you
15 just have to go to the area. I'm attempting to give
16 you what I think is the right answer and using
17 whatever means I can to get to that answer.

18 Q Okay. Just so I'm clear. You don't,
19 you don't, you can't testify to a reasonable degree
20 of scientific certainty that there's a threshold for
21 any of the asbestos fibers for causing mesothelioma,
22 true?

23 A I think there is reasonable data to
24 say for chrysotile, pure chrysotile, there is a
25 threshold.

1 Q And that threshold is infinite because
2 it doesn't cause mesothelioma?

3 A Well, it's either infinite or it's got
4 to be in excess of the Canadian-type exposures.

5 Q And you've based that on the Canadian
6 literature itself?

7 A Well, no, it's, it's a combination of
8 literature is the Canadian literature, there's the
9 South African literature, there's the various
10 chrysotile cement plants, the Brazilian chrysotile
11 information, it's a whole conglomerate of stuff.

12 Q Okay. All of that information was
13 available to Hodgson and Darnton when they wrote
14 their paper, true?

15 A Well, they were trying to get, they
16 were looking at specific cohorts and where there was
17 good exposure documentation. The South African, I
18 don't think there was any fiber measurements,
19 although I can't remember whether they used, I don't
20 think they used the South African chrysotile group,
21 for example. I'd have to go back.

22 Q So you're not basing your belief on
23 the threshold for chrysotile on the South African
24 data because you don't know how much exposure those
25 folks had, true?

1 A Well, what I would say to you is it
2 would have been a substantial exposure similar to
3 the amphibole exposure that the miners in the
4 amphibole mines were getting and no mesotheliomas
5 developed. There have been some estimates of
6 amphibole exposure but not chrysotile as far as I'm
7 aware in South Africa.

8 Q And none -- there were a lot of
9 assumptions in that answer, isn't that true? You're
10 assuming that you have some idea about the data
11 about the dose for chrysotile workers because you're
12 assuming it's similar to the dose of asbestos for
13 the amphibole workers in South Africa, right?

14 A Yes.

15 Q Okay. But yet you concede that there
16 isn't very much data about the amphibole workers
17 exposure, true?

18 A Yes.

19 Q So is it fair to say that your belief
20 about a threshold for chrysotile being either
21 infinite or very high more than the Canadians is
22 based on multiple levels of assumption?

23 A It's based on what you know what
24 happens in other situations as to and to whether
25 those situations were, in fact, what you would call

1 dusty.

2 Q And what evidence you have of that is
3 precious little, true?

4 A Well, I think if you working in an
5 industry, asbestos industry of any kind in the
6 forties, fifties and sixties it would have been
7 dusty.

8 Q True, but you don't have any
9 information about the actual dose of whether that
10 dust --

11 A No, I haven't gotten that actual dose.

12 Q So in order to come up with a real
13 threshold, you would need an actual dose that we
14 could compare to the measurement standards that we
15 use today, true?

16 A Well, that's why Hodgson and Darnton
17 said they didn't, they couldn't identify the
18 threshold because they don't have the specific dose
19 information that allows that.

20 Q And --

21 A It's you have to come to what you
22 think is a reasonable opinion.

23 Q And isn't it fair that at least for
24 when you're going to offer opinions under oath that
25 a reasonable opinion is based on some evidence?

1 A Yes.

2 Q Okay. And the evidence that you have
3 for the dose, doses of those cohorts that help you
4 to get to your threshold, whatever it may be, is
5 very sketchy, true?

6 MR. BISHOP: Objection.

7 A The exposure data is sketchy.

8 Q And, therefore, any opinions you have
9 about that, that threshold would be based on sketchy
10 data?

11 MR. BISHOP: Same objection.

12 A In terms of precise dose, yes.

13 Q It's not your habit or practice
14 outside of in your, as a scientist to rely on
15 sketchy data, is it?

16 MR. BISHOP: Same objection.

17 A It depends. If I do an autopsy, for
18 example, there may be some, somebody dies of a
19 particular problem, you have to interpret the facts
20 as you see them, what you know of the literature,
21 and it may be a problem that is not well dealt with
22 in the literature, or, and you have to make the best
23 estimate possible of what you think happened, so you
24 go on a reasonable degree of medical certainty.

25 Q Okay.

1 A You know, it's like somebody walks
2 down the street, they drop dead, they're brought
3 into the autopsy room, you do an autopsy. You might
4 find coronary artery disease of a significant
5 degree, you might find one or two other diseases of
6 a significant degree, you then have to make a best
7 interpretation of those findings in saying, well,
8 was it the coronary artery disease or was it the
9 lung cancer that he had that involved half his lung,
10 but you don't have the precise scenario beforehand
11 to exactly know what happened.

12 Q In the -- with the Hodgson and Darnton
13 meta-analysis they identify that there are, there
14 are a great deal of variables that could affect the
15 validity of their point estimates, true?

16 A Yes, and they're quite clear-cut about
17 that, they're quite open about that.

18 Q Right. And another thing that's
19 quite, quite clear from the data is that it's
20 entirely possible based on that same data that they
21 use that the potencies are much closer together for
22 those fibers, true?

23 A I doubt it.

24 Q You don't think that's in the paper?

25 A It might be, but I doubt if the

1 potencies are significantly different because if you
2 look at --

3 Q If you stick to my questions, we'll
4 get done here but --

5 A I was trying to answer them in, you
6 know --

7 MR. BISHOP: You go ahead and you
8 finish answering.

9 Q You can finish answering.

10 MR. BISHOP: You can finish your
11 answer, he doesn't have to interrupt.

12 Q Don't think that we're leaving here
13 until we're done with this, with my questions rather
14 than what you --

15 MR. BISHOP: You don't need to badger
16 the witness. Let's just leave that out of
17 it. Let him finish. If you want to move to
18 strike, go ahead and move to strike. I think
19 he's trying to answer your questions and I
20 think you're badgering him.

21 Go ahead, doctor.

22 MR. HARTLEY: And I disagree with you,
23 Bruce. He's answering questions that I
24 didn't ask because he's giving me lectures
25 about when the question was a yes-or-no

1 question, as you well know.

2 A Can you give me the question again?

3 Q She can read it back to you.

4 (Whereupon, requested portion was read
5 back by the Reporter:

6 "Question You don't think that's in
7 the paper?")

8 A I don't know whether it's in the paper
9 because I'd have to read the paper again.

10 Q Okay. Fair enough.

11 You rely on a report that was issued
12 to the EPA by Berman and Crump, true?

13 A As part of the reliance, yes.

14 Q Do you recall what that is listed in
15 here under, is it called by Berman and Crump or is
16 it --

17 A It's EPA.

18 Q -- EPA?

19 A Yes.

20 MR. BISHOP: I'm not sure, could
21 you --

22 MR. HARTLEY: Yes, it's under 39. Do
23 you have that one, Bruce?

24 Okay. We need to change the tape
25 while you're looking for that.

1 THE VIDEOGRAPHER: Going off the
2 record. The time is 1:44 p.m. This is the
3 ends of tape three.

4 (Whereupon, off the record.)

5 (Whereupon, resumed.)

6 THE VIDEOGRAPHER: We're back on the
7 record. The time is 1:50 p.m. This is the
8 beginning of tape four.

9 BY MR. HARTLEY:

10 Q I wanted to ask you a little bit about
11 this document before you. That's something that has
12 come to be called the Berman and Crump methodology,
13 are you familiar with that document?

14 A Yes, I've read the document.

15 Q Have you heard it referred to as the
16 Berman and Crump methodology?

17 A I might have, it doesn't mean much to
18 me, I think it's just basically a meta-analysis
19 type, so I'm not sure of the specific methodologies.

20 Q You haven't read it to criticize it,
21 correct?

22 MR. BISHOP: Objection. Vague and
23 ambiguous.

24 A I'm not quite sure what you mean.

25 Q Yeah, I didn't make a very good

1 question.

2 Have you read it critically?

3 A Yes, I mean I've read it in terms of
4 what they looked at and how they interpreted it and
5 so forth.

6 Q Okay. You didn't check their math,
7 right?

8 A No.

9 Q In fact, you know that they didn't
10 provide all the data to the people who looked at it
11 at the Peer Consultation Workshop, true?

12 A I don't recall that now, it might say
13 it now, I don't know, I don't recall that.

14 Q You understand that that is not the
15 policy of the EPA?

16 A I don't know what the policy of the
17 EPA is.

18 Q You wouldn't represent that to anyone
19 that that is the policy of the EPA what's in that
20 document?

21 A I think it's something that the EPA
22 would use in terms of assessing asbestos-related
23 risk.

24 Q Why do you think that?

25 A Well, it's a draft document provided

1 to the EPA, I presume there are further steps in
2 which it's considered.

3 Q Do you understand that it has been, it
4 has been abandoned that methodology and that a new
5 methodology is being looked at by the EPA?

6 MR. BISHOP: Objection.

7 Mischaracterizes.

8 A I don't understand that completely, I
9 don't know whether there would be new methodology or
10 what.

11 Q You understand that EPA has never used
12 that methodology to assess asbestos-related risk
13 anywhere?

14 A I wouldn't, I don't know.

15 Q What is it about that document that
16 you rely on?

17 A Oh, it summarizes a lot of studies and
18 pulls it all into one sort of place.

19 Q Okay. You don't rely on it for
20 anything more than summarizing studies?

21 MR. BISHOP: Objection.

22 Mischaracterizes.

23 Go ahead.

24 A Well, I think it provides useful
25 information and does it, is it consistent with what

1 I've read in the literature, and it is, so.

2 Q Is it consistent with what you've read
3 in the literature or consistent with what you feel
4 is the better answer about what the literature says?

5 A Well, I suppose it's the, the better
6 answer because I, I think it actually summarizes the
7 literature and I think its interpretation is not too
8 different from mine.

9 Q The important part of in supporting
10 your, your opinion would be not that someone agrees
11 with you but the methodology as to how they got to
12 agree with you, true?

13 A Yes, what data they used to assess
14 the, in this term risk.

15 Q Okay. Like the other meta-analysis we
16 talked about, you don't really feel qualified to
17 analyze their methodology there, true?

18 A Well, in terms of the global
19 methodology, no, but I can criticize specific
20 elements of the data of which they have purported
21 belonged to a certain category. If I have my own
22 knowledge of, for example, certain cohorts that have
23 been put down as being exposed to one type of fiber
24 when, in fact, you know they've been exposed to more
25 than one type, then I think I am quite capable and

1 expert enough to criticize those aspects.

2 Q Well, that's -- I understand that,
3 what I'm getting at more is the meta-analysis part
4 of it. That, you're talking about the study
5 selection and how they're characterized, right?

6 A Well, that's all part of it, yes.

7 Q Right, it is.

8 A You know the statistics of one element
9 of it but it's not the total element. As you said
10 before, if you put the wrong data in, you won't get
11 the right answer, or if you do get the right answer,
12 it will be by accident.

13 Q Okay. And what we know about the data
14 similar to Hodgson and Darnton, what we know about
15 the data that Berman and Crump analyzed is that
16 there's a huge variation and a lot of uncertainty
17 about the dose data, true?

18 A Yes, that's right.

19 Q Some of the studies they've meta
20 analyzed are the same ones that Hodgson and Darnton
21 meta analyzed, right?

22 A Yes.

23 Q One thing that's clear from the Berman
24 and Crump methodology that you've got in front of
25 you is that, if you look at what they write, they

1 write that there is, there is evidence within that
2 statistic, those statistics that they use that the
3 relative potencies are much closer than what they
4 say is their best estimate, true?

5 A I'm sorry, I'm not quite --

6 Q They come up with a range essentially,
7 true?

8 A Yes.

9 Q And they say "We think this is the
10 best point in that range but that there is a wide,
11 wide range."

12 A Yeah.

13 Q True?

14 A Yeah.

15 Q And isn't it true also that
16 statistically every point within that wide range is
17 equally valid, even though some, they have
18 identified ones that they think are the best?

19 A Well, the nearer you get to the
20 middle, the stronger the, the more comfort you have.
21 The more extreme you go in the range, the less, I
22 think the less confidence you have in it.

23 Q Well, isn't it true that the 95
24 percent confidence interval is what they're using
25 there?

1 A Yes, they do, because that's a
2 scientific way. But if you're looking for an
3 interpretation of the data which may not be strictly
4 scientific, then you will go to the mid, you tend to
5 go towards the midpoint.

6 Q And that brings up an interesting
7 point. One of the foundations for the tremolite
8 hypothesis are the Canadian studies, true?

9 A Yes.

10 Q Those are only done to 90 percent
11 confidence intervals, aren't they?

12 A I don't remember what confidence
13 intervals that were used.

14 Q 95 percent confidence interval is the
15 standard, true?

16 A Now it is.

17 Q Right.

18 A When a lot of those studies were I'm
19 not sure 95 percent was the standard.

20 Q Okay. Now, one opinion that would be
21 consistent with Berman and Crump's methodology,
22 assuming that it's reliable, and I'm asking you to
23 assume that for a moment, is that there's a doubling
24 of the risk of asbestos-related mesothelioma if
25 someone is exposed to .7, 0.7 fiber cc years, isn't

1 that true?

2 A In terms of amphibole you mean?

3 Q No, in terms of chrysotile.

4 MR. BISHOP: Could you state it again,
5 I'm sorry?

6 Q 0.7 fiber cc years doubles the risk?

7 A Can you point that out?

8 MR. BISHOP: Can you point it out to
9 him, please?

10 MR. HARTLEY: I'm asking him if he
11 knows that.

12 BY MR. HARTLEY:

13 Q How many pages is that document?

14 A Well, it's that thick (indicates), so
15 I don't -- hundred plus.

16 Q Okay. How, how familiar are you with
17 that document?

18 A Well, I've read it several times but,
19 you know, I've, I've not got an encyclopedic memory
20 that I remember everything on every page.

21 Q Okay. You haven't done anything to
22 really beyond look at the conclusions that they
23 offer, true?

24 A No, I've --

25 MR. BISHOP: Objection.

1 Mischaracterizes testimony.

2 A I've read it and I've read the
3 conclusions to the conclusions are they consistent
4 with what's in the body of the text.

5 Q Okay. You know, I asked you about the
6 Union Carbide potential for doing a cohort study
7 there or any kind of epidemiologic study and I said
8 200 workers, it looks like in this paper he, Coleman
9 talks about 450. The answers wouldn't be any
10 different, would they, when it comes to whether you
11 would expect a mesothelioma if the fiber types were
12 equally potent to Canadian chrysotile to any of the
13 amphiboles?

14 A No, it probably --

15 MR. BISHOP: Objection.

16 A It -- the Canadian rate overall was I
17 think .3 or .4 percent, so that's, you'd have to
18 have a thousand to get three cases. You might start
19 to see one out at 400 and 400. If it was the same
20 potency.

21 Q But one wouldn't be good enough for
22 you to call it significant, right?

23 A Well, it would if the person had not
24 been exposed to other forms of asbestos and you had
25 a fiber burden that showed no amphibole.

1 Q Okay. Now, it also turns out that
2 only 40 of those people of the 450 were exposed for
3 long periods of time up to 15 years. So --

4 MR. HARTLEY: Hi, you're here at our
5 deposition.

6 BY MR. HARTLEY:

7 Q You wouldn't expect, the rate could be
8 triple, the potency of Calidria could be 10 times
9 the rate of crocidolite under your theory that it's
10 500 to 100 to 1 before you would expect to see even
11 a single case of mesothelioma in a group of 40
12 people who had 15 years of exposure?

13 A I'm sorry, go back again, that
14 question again, you were talking about crocidolite
15 and you're talking about a lot of different things.

16 Q Yeah, it's hypothetical, essentially
17 what I'm saying to you is: What this article
18 reports that you brought with you in your reliance
19 materials is that 450 workers worked at the mill or
20 mine over time, okay, and that he reports, quote, 40
21 of whom have been employed for over 15 years, okay?

22 A Yeah.

23 Q So presumably the point there is that
24 40 of them may have had higher exposures than the
25 people who were there for less than 15 years, okay,

1 is that what you would take that to mean?

2 A I don't know what it really means. I
3 mean did the, are the 360 to 400 people worked for
4 10 years or 12 years, did they work in the same part
5 of the plant, were they involved with the tailings
6 or were they involved with the feed, it might all be
7 different.

8 Q Right, and all things you'd need to
9 know before you go on and rely on the lack of, lack
10 of disease in, you know, a group of 450 people,
11 right?

12 A Yeah.

13 Q Okay. Now, when you're talking about
14 looking at a group of 40 people, that would be even
15 more, it would be even, it would be even a bigger
16 haystack to look for that mesothelioma, true?

17 A I'm not sure you're just dealing with
18 40 people, you've picked out the magic figure of 15,
19 yes, I don't know what the others were exposed to.
20 If you look, if you were talking about potency being
21 as great as amphibole as crocidolite, if you look at
22 factories where people have worked with crocidolite,
23 about a quarter or third of them occur in people who
24 have been exposed less than a year.

25 Q Okay. In fact, looking at time in a

1 workplace is really a bad surrogate for exposure,
2 isn't it?

3 A No, time can be very useful. If
4 you -- it becomes useful in cohort studies, in
5 factory studies where you're trying to assess dose,
6 for example, and you may use time as that element,
7 but it's useful in that particular facility you can
8 say this person had 12 months of exposure, that one
9 two years, et cetera, and you can see how the rates
10 of disease vary and you can get some idea of dose
11 response, but what you can't do is you take that
12 cohort from that particular factory and then compare
13 it with another cohort doing a completely different
14 process.

15 Q No, I wasn't, I wasn't asking you to
16 do that either, what I was asking you was to assume
17 that, that Calidria was many times more potent than
18 crocidolite. In a group of 40 people who presumably
19 would have had the highest exposures because they
20 were there the longest, you still would not expect
21 to find a mesothelioma even if, even if this stuff
22 were super potent compared to --

23 A Well, if it was super potent, you
24 would be then looking at the rates that they had in
25 gas mask workers and the cigarette filter workers

1 who assembled, and they were 15 percent plus. So in
2 40 people you might well have got a couple of
3 mesotheliomas, if they were that, if it was that
4 potent.

5 Q Okay. How many workers in the gas
6 mask cohorts?

7 A It was about a thousand.

8 Q Haven't there been reports of
9 mesotheliomas in the chrysotile gas mask workers?

10 A There was one and it clearly says in
11 the paper that they were also exposed to
12 crocidolite. That was the only one as far as I
13 know.

14 Q Okay. There have been no other
15 reports as far as you're aware?

16 A Not to my knowledge. And neither have
17 I seen one whereas I've seen a number that have been
18 referred to me from the military gas mask, that's
19 the crocidolite ones, I haven't had any that was a
20 mesothelioma that occurred in a chrysotile facility.

21 Q Have you been on the lookout for
22 those?

23 A Well, I mean we're the main center in
24 the U.K. for referring this kind of stuff and no,
25 not on lookout because I haven't got the, either the

1 finance or the logistics to, you know, be doing a
2 surveillance program all over the U.K. in various
3 places but I think if, it's likely that if somebody
4 got mesothelioma from say working in the civilian
5 gas mask works, the lung tissue would likely end up
6 in my lab.

7 Q Okay. A couple -- Dr. David
8 Bernstein, do you know him?

9 A I know of him, I've never met him, I
10 don't know him as such.

11 Q You understand that he has been funded
12 by Union Carbide to do some of his papers?

13 A I saw that the work was funded by
14 Union Carbide. I think it says on the papers --

15 Q Right.

16 A -- to that effect.

17 Q Other than litigation can you think of
18 any reason why Union Carbide would be funding work
19 relating to a product line that they sold in the
20 1980s?

21 MR. BISHOP: Objection. Calls for
22 speculation.

23 A I don't know. I mean it's you were
24 sort of saying about shouldn't they fund an
25 epidemiological study, wouldn't it be reasonable

1 that they fund a study on the in vivo effects of
2 Calidria.

3 Q Dr. Bernstein looked at animals and
4 came -- and basically did studies that had been done
5 before, didn't he?

6 A Not exactly, they were -- you said
7 there was, the data in the literature is very
8 sketchy, it's much more detailed in those
9 experiments.

10 Q Dr. Bernstein knows a good bit about
11 rats because he's been working on them all long,
12 right?

13 A Well, it's a toxicological study and
14 therefore you don't generally do toxicological
15 studies in humans, not in the USA or the U.K.
16 anyway.

17 Q Rats are poor surrogates for humans
18 when it comes to inhalation studies because they
19 have different respiratory tracts, true?

20 A Yes.

21 Q So when you look at an inhalation
22 study of rats, it's not very telling about what
23 doses of asbestos would affect humans the way -- let
24 me finish and then you can answer. And I'll start,
25 start again.

1 Respiratory studies using rats have
2 limitations in application to humans because of the
3 differences in the respiratory tracts, true?

4 A Yes.

5 Q Okay. Rats are nose breathers whereas
6 humans breathe through their nose and mouth, true?

7 A Yes.

8 Q Those are limitations that are
9 recognized by people who work in that area, true?

10 A Yes.

11 Q The evidence of biopersistence in a
12 rat may or may not be accurate for the evidence of
13 biopersistence in humans, true?

14 MR. BISHOP: Objection.

15 A Yes.

16 Q There's no way to test it, in fact, is
17 there?

18 A Well, you have some other information
19 on biopersistence in humans. There have been fiber
20 burden studies done in lungs, for example, Churg
21 from Canadian miners and millers which suggests that
22 chrysotile is cleared relatively quickly and it fits
23 with the animal data.

24 Q Okay. And the evidence, there isn't
25 any evidence that allows you to correlate the

1 biopersistence of asbestos in the pleura of rats as
2 compared to humans, is there?

3 A I think there's a good, not strictly
4 in comparison to tumor -- to humans but
5 biopersistence appears to be extremely important of
6 whether you get mesothelioma or not and, therefore,
7 a study in a rat is useful in terms of showing
8 comparable how, for example, amphibole fibers
9 compare with chrysotile and how chrysotile compares
10 with manmade mineral fibers, et cetera. In manmade
11 mineral fibers there are a lot of studies done in
12 this way inhalation-wise to try and predict possible
13 risk of fiber-related disease in humans.

14 Q Okay.

15 A And it is a way of WHO characterizing
16 carcinogenicity, for example.

17 MR. BISHOP: Whoever hasn't muted
18 their phone, could they please mute their
19 phone? Thanks.

20 BY MR. HARTLEY:

21 Q Now, there are several people who have
22 published in the last few years about asbestos found
23 in the pleural tissue, true?

24 A Yes.

25 Q Okay. Those people tend to believe

1 and published in peer reviewed journals to this
2 effect that it's the asbestos that gets to the
3 pleura that causes the mesotheliomas, true?

4 A Yes.

5 Q You haven't looked at that issue in
6 your own, in your own scientific practice you don't
7 look at the pleural tissue and do fiber burden
8 analysis as a routine matter, true?

9 A Not as a routine, we have studies in
10 which we've compared pleural lung.

11 Q In your work you've seen that the
12 predominant fiber found in the pleura is chrysotile,
13 true?

14 A It depends where you look in the
15 pleura. If you look on the visceral pleura, the
16 predominant fiber you find is short-fibered
17 chrysotile. If you look in the black spots in the
18 parietal pleura, you'll find amphiboles.

19 Q Okay. So what we know in general
20 terms, though, is that the most of the pleura is, in
21 terms of the volume of pleura black spots are
22 anomalies, true?

23 A Not anomalies because they're present
24 in the parietal pleura of individuals who, you know,
25 live in towns and so forth.

1 Q Bad question.

2 Black spots are things that you find
3 on -- in spots so that most of the pleura where
4 there are black spots is not, are not black spots,
5 true?

6 A Yeah, but that's because that's where
7 the dust congregates and any dust congregates,
8 that's why they're black.

9 Q Okay. And the majority of the tissue,
10 i.e., where they're -- where black spots are not,
11 the fiber that you found predominantly in your work
12 was short fiber chrysotile, true?

13 A Well, we -- it wasn't my work that
14 looked at the black spots versus the in between
15 mids, that was Dumortier and Boutin.

16 Q Right. I'm talking about your work.
17 You found chrysotile --

18 A We looked --

19 Q -- predominantly?

20 A -- at the visceral pleura, not at the
21 parietal pleura, although we did find some amphibole
22 in the visceral pleura as well.

23 Q Sure. And other researchers have also
24 come to the same findings that you have, you have
25 come to that the predominant fibers are short fiber

1 chrysotiles in the pleura, true?

2 A In the, in the visceral pleura.

3 Q Okay. Are you suggesting that the

4 results are otherwise outside of the visceral

5 pleura?

6 A Well, if you look at the parietal

7 pleura and you look at the black spots, that's where

8 the amphiboles are concentrated as the carbon

9 particles are concentrated.

10 Q Okay. The carbon particles are what

11 make the spots black, true?

12 A Yeah.

13 Q Asbestos doesn't do that?

14 A Correct.

15 Q Now -- I'm forgetting the first

16 fellow. Who was the first author with Boutin?

17 A I think it might have been Boutin was

18 the first author, I can't --

19 Q That's right. You called it, you said

20 someone else, that's why.

21 A Well, there's Boutin, Dumortier.

22 Q Dumortier you said.

23 A I think, yes.

24 Q In the work that you're referring to

25 there, they are actually not looking, they're

1 looking at the black spots themselves rather than
2 looking at the parietal pleura outside of the spots,
3 true?

4 A Well, they looked at the black spots
5 specifically, yes.

6 Q Right. They didn't compare the
7 non-spotted portions of the parietal pleura versus
8 the --

9 A Could I go back to the paper and I'll
10 tell you?

11 Q Sure.

12 MR. BISHOP: Give me a number and I'll
13 find it.

14 MR. HARTLEY: I'll try. At least one
15 of them is 10.

16 MR. BISHOP: Okay.

17 MR. HARTLEY: That's the Boutin paper.
18 Dumortier is the --

19 MR. BISHOP: Yeah, Dumortier is the
20 2002 as I recall.

21 MR. HARTLEY: Yeah.

22 A I mean Dumortier did the analysis,
23 that's why I tend to remember his name. (Reviews.)

24 They did compare with normal pleura.

25 Q Side by side?

1 A Yeah.

2 Q Okay.

3 A Black spots in normal pleura and there
4 was more fiber in the black spots.

5 Q Okay. Was the ratio of chrysotile to
6 amphibole the same outside of the black spots?

7 A Well, it says in this summary
8 amphiboles outnumbered chrysotile in all samples.

9 Q Okay. So that would be consistent
10 with someone who just had greater exposure to
11 amphiboles, wouldn't it, rather than suggesting that
12 the black spots were caused by the amphiboles and
13 the chrysotile was non-potent?

14 MR. BISHOP: Objection. Vague and
15 ambiguous.

16 Go ahead.

17 A I was just checking. These were done
18 in, where they did thoracoscopies in live patients,
19 you see they were doing and looking at these for
20 other reasons, pleurisy, not pneumothorax, so they
21 were looking basically at the general populations.

22 Q Okay. But my question is if, I
23 mean -- let me understand first.

24 Are you suggesting your understanding
25 of these papers is that amphiboles concentrate in

1 the black spots and therefore they are doing
2 something whereas the short fiber chrysotile is not
3 causing disease in the pleura?

4 A Yeah, I think if you look at --

5 Q Okay.

6 A That's it.

7 Q That yes to that, then the question is
8 how do you get that from a situation where both the
9 black spots and the, and the unspotted parietal
10 pleura have similar ratios of amphiboles to
11 chrysotile, isn't it more, isn't it completely
12 consistent with that finding that the person just
13 had a greater exposure to amphibole and therefore
14 every bit of the pleura, both the black spots and
15 the, and the unspotted portions got dusted with some
16 amphibole and some chrysotile?

17 A Yeah, I don't know what you mean by
18 more exposure. These weren't on asbestos workers as
19 such, this was just looking I think in a general
20 series of thoracoscopies.

21 MR. HARTLEY: Is there something that
22 helps him, Bruce?

23 MR. BISHOP: Yeah, I just showed him
24 the article. I think it will help.

25 A You got an insulation worker, you got

1 a tunnel digger, a shipyard worker, a seamstress, a
2 mechanic, so you've got a mixed bag basically, a
3 coal miner, a restaurant operator.

4 Q I mean I'm not a scientist, I'm just
5 trying to figure out how you can take, how you can
6 make a conclusion if the evidence is that amphiboles
7 outnumbered chrysotile in all of those samples, how
8 you can make --

9 A Yeah, no --

10 Q Let me finish, please, so we can have
11 a clear record.

12 So how you can make a -- make the leap
13 that it's the amphiboles that are causing the
14 disease in that, in this case the black spots, when
15 the evidence is that there was amphibole throughout
16 at a greater ratio to chrysotile throughout the
17 pleura not just in the black spots?

18 A I think because the fibers concentrate
19 and there are higher numbers of fibers total in the
20 black spots, therefore, there would be higher
21 numbers of amphibole fibers in the black spots and
22 that will correlate with a degree of amphibole
23 exposure.

24 Q Okay. Now the black spots, there
25 would be, there are some potential reasons for those

1 black spots such as there are potential explanations
2 that would need to be ruled out before you could
3 make that judgment such as is there something about
4 the carbon that gets there that causes the
5 amphiboles to remain longer in the lung than in the
6 other portions of the pleura, true?

7 A No, no, I think it's just a
8 preferential site at deposition.

9 Q How can you -- it is preferential,
10 there's no question about that if the data is
11 correct.

12 A Yeah.

13 Q The question is: Is there anything
14 that can be drawn from that and -- do you follow me?
15 Let me try to explain it a little bit.

16 A I think you're trying to take the
17 paper farther than it means to go.

18 Q Okay.

19 A I think the point of the paper was to
20 see there's been this discussion about why, you
21 know, you only find chrysotile in the pleura, you
22 got mesothelioma occurs in the pleura, therefore, it
23 must be the chrysotile, and that doesn't fit with
24 the epidemiology, and they have looked to see are
25 there preferential sites in the pleura where the

1 amphiboles tend to congregate and they appear to be
2 there.

3 Q Okay.

4 A So, and if you, if you don't look in
5 those sites, you may not find amphibole fiber.

6 Q Now other scientists who have devoted
7 a good bit of their time to looking at the pleural
8 tissue have reached a different conclusion than you
9 and to whatever degree the authors of the Boutin et
10 al. paper have reached, true?

11 A Yes.

12 Q Who are some of those?

13 A Well, the only ones I think that have
14 actually done that sort of any work, any -- and they
15 haven't done it in precisely the same way, would be
16 Hammar and Dodson I suppose.

17 Q Okay. Those are two very
18 well-respected pathologists?

19 A Hammar's a pathologist, Dodson isn't a
20 pathologist. I don't think Dodson's medical.

21 Q Okay. Dodson is a microscopist I
22 guess?

23 A Yes.

24 Q Okay. Both well-respected scientists?

25 A Yes.

1 Q They're both people who have published
2 some groundbreaking work in their areas?

3 A Well, they publish a lot of work, yes,
4 I don't -- groundbreaking is a bit emoting.

5 Q Okay. They are important contributors
6 to the field?

7 A Yes.

8 Q Okay. Dr. Suzuki is another person
9 who has written in the area, true?

10 A Yes.

11 Q Okay. Your tone tells me that you
12 have some concerns about Dr. Suzuki?

13 A Yes, I've never, I've always -- well,
14 not in every paper but there's substantial number of
15 papers that I think it's not consistent with the
16 rest of the literature.

17 Q Dr. Suzuki was a pathologist, right?

18 A I think he was a pathologist but he
19 also seemed to be a mineralogist as well and I
20 don't, I don't know what he did on a day-to-day
21 basis in term of whether I don't think he did a,
22 what you would call a service work as such.

23 Q That I don't understand.

24 A I don't think he was reporting
25 biopsies out on people. I don't think. I don't

1 know for certain.

2 Q Now you understand that in 2002, 2003
3 and then 2005 he published papers that indicated
4 that chrysotile was the predominant fiber in the
5 pleura, true?

6 A Yes.

7 Q Okay. And you're not suggesting that
8 his results were fabricated, are you?

9 A No.

10 Q You don't have any reason to question
11 his methodologies, do you?

12 A Well, I have spoken to people about
13 his methodology and they're not very reassuring
14 about it, but I am not an expert in the
15 methodologies you elucidated earlier.

16 Q Who have you spoken to --

17 A Well, I know --

18 Q -- about Dr. Suzuki?

19 A I know Professor Pooley does not think
20 that the method, he says it's an outdated
21 methodology that nobody else uses, it hasn't been
22 used for years, the preparation method, and it's
23 poorly reproducible.

24 Q But you don't really know whether he's
25 right about that, do you?

1 A You just asked me what my concerns
2 are.

3 Q I understand.

4 A I'm just giving you what they are.

5 Q I understand. To be clear so that, so
6 that we get your scientific opinions. You don't
7 have any opinions about, that you hold to reasonable
8 degree of scientific certainty about Dr. Suzuki's
9 work?

10 MR. BISHOP: Objection. That's vague
11 and ambiguous. Overbroad.

12 A I'll put it this way, I wouldn't want
13 to rely on that for my opinion.

14 Q Yeah, I understand that part of it.
15 Let me ask: You aren't qualified to criticize it
16 because you're not familiar with the work and the
17 methodologies that Dr. Pooley told you were not up
18 to his what he thinks is appropriate?

19 MR. BISHOP: Objection. Overly vague
20 and broad.

21 Go ahead.

22 A Well, I've read the papers and I do
23 have issues with the sorts of controls and so forth.
24 There's a lot of lack of clarity in some of the
25 paper about what they're actually looking at.

1 And then I have this other concern of
2 the actual methods of preparation and analysis which
3 I, I will agree is not within my field of expertise,
4 but talking to somebody that I am very comfortable
5 on relying on in terms of methodology in that
6 particular field I would, you know, regard as, you
7 know, a substantial concern for me.

8 Q Does Dr. Pooley -- that's who you're
9 talking about, right?

10 A Yes.

11 Q Does Dr. Pooley still consult for
12 Union Carbide?

13 A I don't know.

14 Q You don't talk to him about it given
15 that you see him weekly?

16 A Oh, we tend to talk about research
17 projects, about the running of the electron
18 microscopical unit. I don't actually ask him about
19 what cases he does for litigation and he doesn't ask
20 me. That's his, that's his agreement, not mine.

21 Q How did it -- it must have come up in
22 litigation that Dr. Pooley talked to you about
23 his --

24 A You know, if we get a paper and we
25 think, for example, if I pick up a paper and I find

1 that I think this doesn't really, this sticks out as
2 not being consistent with what I've seen before or
3 what I think is the correct thing, and it involves
4 maybe some mineralogy, I will actually ask Fred
5 Pooley about it, and may give him a copy of the
6 paper to look at to see what he makes of it.

7 Q You kind of jumped the gun on my
8 question. I assume -- is it fair that you became
9 aware of Dr. Suzuki's papers and your concerns that
10 you got from Dr. Pooley in the litigation context?

11 A No, I don't think so, I think it goes
12 back to the issue. I've been interested in the
13 chrysotile versus the amphibole issue now for 20
14 years or more and there's certain information that
15 leads me to believe and think that amphiboles is
16 hugely more important than chrysotile and chrysotile
17 may not cause mesothelioma.

18 If I then read a paper that says, for
19 example, the Smith article says chrysotile is the
20 main cause of mesothelioma, and I think to myself,
21 where is the evidence for that, you know, why aren't
22 we seeing, you know, chrysotile is 90, 95 percent of
23 the literature, why aren't we seeing all these
24 chrysotile-induced mesotheliomas without amphibole?
25 And then Suzuki produces these sort of papers and

1 more or less says, you know, chrysotile is the fiber
2 that's doing it all. It just doesn't stack up with
3 the rest of the evidence that I've seen and,
4 therefore, I would want to look at that paper very
5 carefully and see well, what is the problem with it,
6 what are the problems?

7 MR. HARTLEY: Objection:

8 Nonresponsive.

9 BY MR. HARTLEY:

10 Q Can you identify all of the problems
11 that you and/or Dr. Pooley has told you that there
12 are with the Suzuki papers?

13 A Well, as I mentioned, his methodology.
14 I think there's a problem with controls and a
15 problem with actually measuring the fibers in the
16 visceral pleura of people who don't have pleural
17 thickening because the parietal -- the visceral
18 pleura is so densely adherent to the lung that your
19 ability to strip off that is you're going to get
20 some lung with it and, therefore, what you may be
21 measuring is fibers actually within the lung.

22 So, the other thing is he takes very
23 small, if I remember, takes very small samples in
24 which you could easily miss other fibers.

25 Q Okay. So within your realm of, of

1 your expertise, you believe that it's difficult to
2 get the samples that he says he got?

3 A Yes.

4 Q Okay. And then what Dr. Pooley told
5 you was there were some issues about controls?

6 A No. The controls are, what I'm
7 talking about, you know, the controls in terms of
8 non-asbestos exposed, et cetera, and non-diseased
9 controls.

10 Q What is the, what is the problem with
11 the controls?

12 A One, I don't think there was enough of
13 them. And two, as I told you, if you don't have
14 pleural thickening that you shouldn't have in the
15 controls, stripping the visceral pleura off to find
16 fibers is, is I don't think possible without taking
17 some lung.

18 Q It's not possible to remove pleura in
19 someone without pleural thickening, is that what
20 you're saying? I just want --

21 MR. BISHOP: Hold on. I'm sorry, you
22 mischaracterized it, he said visceral pleura.

23 MR. HARTLEY: Fair enough.

24 Q Visceral pleura?

25 A Yes.

1 Q Okay. It's not, it's your belief that
2 it's not possible to remove that visceral pleura in
3 someone who does not have pleural thickening without
4 getting lung, true?

5 A Yeah. You might be able to do it now
6 with laser methods but you couldn't then.

7 Q Okay. I just wanted to make sure I
8 understood. Any other concerns?

9 A That's broadly what my concerns are,
10 there may be more, I don't know.

11 Q None that you are aware of as you sit
12 here now?

13 A That I can recall as I sit here.

14 Q Right. None that you -- anything else
15 that Dr. Pooley told you that he's concerned about?

16 A No.

17 Q Now, it turns out that Dr. Suzuki's
18 work is consistent with what Hammar and Dodson have
19 found, isn't it?

20 A Which specific -- it's very -- well,
21 no, which specific paper are you talking about?

22 Q Do you know? I mean can you say that
23 you think, because you earlier today, let me ask you
24 this, earlier today you have said that some results
25 are consistent with your experience in the

1 literature without identifying which papers and the
2 like, true?

3 A Yeah.

4 Q Okay. The same, using the same broad,
5 broad approach do you believe that what you've seen
6 of Dr. Suzuki's work is consistent with the work of
7 Dodson and Hammar?

8 MR. BISHOP: If you can answer that
9 without --

10 MR. HARTLEY: Yeah, absolutely, I'm
11 only asking if he can answer it.

12 A I don't think it is, and this is just
13 talking about broad terms. I know that they looked
14 at a series of mesotheliomas from the Pacific West
15 Coast and, in fact, in every one of them I think
16 they found substantial amphiboles. They didn't,
17 they were not able to hone down and say these are
18 chrysotile-induced mesotheliomas.

19 Q Dr. Suzuki found some cases with only
20 amphiboles in his work, true?

21 A Yes.

22 Q He found cases with only chrysotile,
23 true?

24 A Yes.

25 Q He found cases with both, true?

1 A Yes.

2 Q He found cases where the ratio was
3 higher amphibole to chrysotile?

4 A Yes.

5 Q He found cases where chrysotile was
6 higher than amphibole?

7 A Yes.

8 Q So, in other words, Dr. Suzuki found
9 all possible combinations?

10 A Yes.

11 Q Okay. In a situation like that using
12 the same methodology, if there was, if there was
13 contamination in the lab, you would expect a lab
14 contamination to be somewhat uniform, wouldn't you?

15 A I don't think you can expect that, the
16 contamination may vary over periods of time and in
17 different parts of the lab.

18 Q If there, if there is, if there's a
19 contamination problem you would never expect to find
20 only one kind of asbestos in the samples, though,
21 true?

22 A But you may get be getting false
23 numbers for certain when you're finding already
24 fibers, there may be fibers that should be there or
25 are there and fibers you are finding that shouldn't

1 be there because you've put them there, so you could
2 get a mixture of fibers.

3 Q In terms of the, and I'm jumping
4 around because this is all complex stuff, what was
5 the level of detection in Dr. Pooley's testing of
6 Calidria?

7 A I don't know the exact, it's well down
8 into less than 1 percent I think.

9 Q You can't identify that, though?

10 A If it's -- I don't know if it says in
11 the document, I --

12 Q It would be important to know what the
13 level of detection is for his methodology, wouldn't
14 it?

15 A Yeah, I think the, the special
16 preparation method is designed to take it well below
17 the 1 percent.

18 Q Okay. How -- does it say how much
19 below?

20 A (Reviews.)
21 It says basically to 0.1 percent.

22 Q Zero-point-one percent?

23 A Well, in fact, they were aiming to get
24 below the .1 percent.

25 Q Are you familiar with the

1 integration -- Integrated Risk Information System?

2 A No.

3 Q IRIS is the acronym used?

4 A No.

5 Q Okay. If I told you that's the,
6 that's the risk assessment methodology used by the
7 United States Environmental Protection Agency for
8 asbestos, would that help?

9 A No.

10 Q Okay. That document, the Berman and
11 Crump methodology, has not been peer reviewed, has
12 it?

13 A I don't know.

14 Q Okay. Do you want to rely on a
15 document that's not been peer reviewed?

16 A I think if the document is, looks
17 reasonable in its methodology, the data that it
18 provides, the conclusions that it draws, yeah.

19 Q Okay.

20 A As we can see, some peer reviewed
21 papers I wouldn't want to rely on.

22 Q Okay. Again, you have some ability to
23 look at it and see what they said and decide whether
24 there's some things that you feel confident to
25 criticize about that meta-analysis and other things

1 that you don't, true?

2 A Yes.

3 Q Ultimately without that peer review
4 where people who are qualified to look at all of it,
5 isn't it fair to say that you're -- that you don't
6 know whether it's reliable?

7 A I think, I think most of it is
8 reliable because it falls with, consistently with
9 consistency into other studies that I've seen that
10 come to similar conclusions. Whether there's a
11 small percentage of it that is not reliable I don't
12 know.

13 Q In terms of coming up with your
14 reliance materials, did you have some help gathering
15 these materials from the lawyers?

16 A Yes, but I mean we've discussed these
17 over the years and we agreed to list.

18 Q On here there is another article by
19 Kevin Brown who we've mentioned him?

20 A Yes.

21 Q Kevin Brown was a medical director for
22 an asbestos company for a period?

23 A Yes. Well, I don't know if medical
24 director is the right term. He worked as a -- an
25 occupational medicine person in that company, I

1 don't know what his precise title was.

2 Q He worked at -- he worked for a
3 company that had had some interest in how asbestos
4 was viewed in the medical and scientific community,
5 true?

6 A Yes.

7 Q Okay. He's the person who co-authored
8 the threshold article that, that Hodgson and Darnton
9 called Logical Nonsense, right?

10 A Yes.

11 MR. BISHOP: I'm sorry, I object to
12 the characterization.

13 Q It's true, isn't it, that he did that?

14 A Well, he co-authored that article and
15 that's what Hodgson and Darnton commented in their
16 meta-analysis paper.

17 Q Okay. Dr. McDonald was funded in part
18 by companies that had an interest in how asbestos
19 was viewed in the medical and scientific literature,
20 true?

21 A Probably.

22 Q He was funded by the Quebec Asbestos
23 Mining Association, right?

24 A I don't know how much, but yes, some
25 of it.

1 Q That was a consortium of asbestos
2 companies, wasn't it?

3 A As far as I know.

4 Q Okay. Have you ever received funding
5 from them?

6 A No.

7 Q Now, Dr. Bernstein was also funded by
8 the Chrysotile Institute which is the successor to
9 the QAMA, true?

10 A QAMA?

11 Q Quebec Asbestos Mining Association.

12 A Yeah, maybe, I don't keep a track on
13 these sort of organizations and how they change
14 names, et cetera.

15 Q You're familiar with the Asbestos
16 Institute or the Chrysotile Institute?

17 A I wouldn't say I'm familiar with it,
18 I've heard of it, I've not had any dealings with it.

19 Q You know that's an organization that
20 promotes the use and sale of chrysotile asbestos,
21 right?

22 A I don't know what it does.

23 Q Bruce Case is another person who was
24 funded in part by the Canadian chrysotile?

25 MR. BISHOP: Objection. It's

1 absolutely false, you know that.

2 MR. HARTLEY: Bruce, let me finish my
3 question before you --

4 MR. BISHOP: You know it's false. Go
5 ahead.

6 BY MR. HARTLEY:

7 Q Do you know who Bruce Case is?

8 A Yes, I know who Bruce Case is.

9 Q Did Bruce Case receive funding from
10 the Quebec Asbestos Mining Association?

11 A I don't know.

12 Q Okay. Are you familiar with Kenny
13 Crump?

14 A I don't know him, no, I mean only
15 through the EPA document.

16 Q Do you know that Kenny Crump developed
17 an earlier version of that methodology for the
18 Asbestos Information Association of North America?

19 A No.

20 Q Would that be important to you?

21 A No.

22 Q The fact that he developed a
23 methodology for an organization that was promoting
24 the use of asbestos in the United States?

25 A It doesn't, that doesn't bother me,

1 it's just the actual as it appears in this document
2 what does the methodology look like and it looks
3 okay to me.

4 Q Doctor, we've talked about Dr. Ilgren,
5 you both testified in that trial in Minnesota,
6 right?

7 A So you tell me, yes.

8 Q Okay. Well, did you know he did?

9 A I didn't know whether he testified or
10 not I don't think.

11 Q You knew he was a consultant in the
12 case?

13 A Yes.

14 Q Okay. And Dr. Chatfield, do you know
15 if he testifies for Union Carbide?

16 A I don't know, I presume he does.

17 MR. BISHOP: Don't presume anything,
18 just tell him if you know.

19 A I don't know.

20 Q Okay. When you say you presume he
21 did, did you presume it because I suggested it or
22 because you thought he did?

23 A It's the powers of your persuasion I
24 think.

25 Q Good Lord. That's scary.

1 You mentioned Dr., you mentioned
2 earlier Dr. Brooke Mossman, she has consulted for
3 the asbestos industry, true?

4 A I don't know.

5 Q Okay. If I provide you evidence that
6 she offered Owens-Corning's medical director copies
7 of her paper to edit before it was published, would
8 that give you concern?

9 A It would surprise me.

10 Q That would be a potential conflict of
11 interest anyway, right?

12 A Yes.

13 Q Because you know that Owens-Corning
14 Fiberglass was a company that made and sold
15 asbestos-containing products, right?

16 A Yes.

17 Q They would be very concerned about how
18 asbestos was viewed in the medical and scientific
19 literature, true?

20 A Yes.

21 Q Dr. H.W. Ory, do you know who that is?

22 A Can I have a look at the paper?

23 Q Sure.

24 A I may know the other co-authors.

25 Q No, this one is all by himself.

1 A Yes, I think he's a sort of
2 epidemiologist-comma-statistician.

3 MR. HARTLEY: Could we look at 83,
4 Bruce?

5 MR. BISHOP: Sure.

6 MR. HARTLEY: As you're pulling that
7 out, is that the same Ory as the one in 84
8 with a different spelling?

9 Yeah, I don't know, I'm asking you
10 guys just -- well, there's the one who's the
11 co-author of Roggli.

12 MR. BISHOP: Oh, no, that's different.

13 MR. HARTLEY: Okay.

14 MR. BISHOP: Yeah.

15 MR. HARTLEY: That's why I was asking.

16 MR. BISHOP: Yeah, the co-author with
17 Roggli is a pathologist.

18 MR. HARTLEY: That's what I thought, I
19 didn't know.

20 MR. BISHOP: This is, this is the SEER
21 data analysis.

22 MR. HARTLEY: Okay.

23 BY MR. HARTLEY:

24 Q What we have here is what you've
25 referenced in your list as Analysis of Mesothelioma

1 Rates in SEER data for San Benito and Monterey
2 Counties. Have you read that document?

3 A Yes.

4 Q That's a document where this guy
5 looked at the death data in the counties and came to
6 the conclusion that there's no elevated rates of
7 mesothelioma there, right?

8 A Yes.

9 Q And we discussed that this isn't very
10 telling information in terms of whether Calidria
11 causes mesothelioma, right?

12 MR. BISHOP: Objection.

13 Mischaracterizes testimony.

14 Go ahead.

15 A It's one piece of information.

16 Q It's not very persuasive on its own,
17 is it?

18 A On its own, no, but I wouldn't take
19 any piece of information on its own.

20 Q In fact, this piece of information
21 really doesn't help you at all because you believe
22 that based on all the other stuff that's been peer
23 reviewed that chrysotile doesn't cause mesothelioma,
24 right?

25 A I have -- on the evidence I've seen to

1 date that's my opinion.

2 Q And this is not the kind of evidence
3 that you would want to rely on because it's not,
4 well, even to you as an untrained, you're not
5 trained as an epidemiologist, this isn't something
6 you'd want to rely on for that?

7 MR. BISHOP: Objection.

8 Mischaracterizes his testimony.

9 A It's just to look at the general
10 incidence rates of mesothelioma in that particular
11 area and if they were high, then you would, you
12 would then want to look in that particular area what
13 the source of that was.

14 Q Right.

15 A It wouldn't tell you specifically what
16 the source was but it would tell you in this area
17 there is a problem.

18 Q It would tell you that in that county
19 there's a problem but it wouldn't give you any
20 indications as to what the problem was, true?

21 A That's right, yes.

22 Q And given the fact that we have no
23 idea about how long the people in the SEER data were
24 there, what they did, where they went, where they
25 lived before they died, this paper, which is the

1 Reference 83 in your list, doesn't tell you much
2 about the issue of whether Calidria asbestos causes
3 mesothelioma at all, does it?

4 MR. BISHOP: Same objection.

5 A It's one piece of the jigsaw, so it's
6 a bit of evidence that we'll weigh to slightly but
7 it's not the only thing that I would rely on.

8 Q Well, it would -- it's really not
9 supportive of that proposition at all, is it?

10 A Well, it --

11 MR. BISHOP: Objection.

12 Mischaracterizes his testimony.

13 Go ahead.

14 A It, it -- as to up to the point of
15 this particular examination there does not seem to
16 be a problem with mesothelioma in that area.

17 Q Based on the limited picture of data
18 that's presented?

19 A Yeah.

20 Q Okay. And this is an un-peer reviewed
21 document?

22 A Yes.

23 Q You don't know if the SEER data was
24 accurately recorded?

25 A I think the SEER data as collected is

1 valid.

2 Q You know that the SEER data misses a
3 lot of cases of mesothelioma, doesn't it?

4 A Yes, yes, it can miss cases, yeah.

5 Q And there's documented evidence that
6 the SEER data isn't all that accurate, isn't there?

7 MR. BISHOP: Objection.

8 A Well, you have to look to see why it's
9 particularly messed up in this particular area than
10 compared with other areas.

11 Q And you haven't done that yet so you
12 can't rely on that?

13 A I see data in other areas showing high
14 rates of mesothelioma, so they must get it right
15 somewhere.

16 Q Maybe those people all moved from King
17 City, huh?

18 MR. BISHOP: Objection.

19 Q Isn't that possible?

20 A Anything's possible. They might have
21 all gone to Hawaii, I don't know.

22 Q Hawaii is a lot more attractive than
23 King City, isn't it?

24 MR. KLASING: I've never been to King
25 City, I'll assume that's true.

1 A The King City Tourist Board might be a
2 bit upset.

3 Q This isn't the kind of, this isn't the
4 kind of report that a scientist relies on to offer
5 scientific opinions, is it, sir?

6 MR. BISHOP: Objection.

7 Mischaracterizes his opinion. You've already
8 asked it eight times.

9 Go ahead.

10 A It's part of that whole weight of
11 evidence if you like.

12 Q Okay. Okay. You're going to rely on
13 this despite your concerns about the SEER data?

14 A I'm not solely relying on it, it's
15 part of the materials of which I've got and you've
16 got the list --

17 Q Right.

18 A -- the numbers, it fits into that
19 portfolio.

20 Q This gentleman was a consultant to
21 lawyers in litigation for Union Carbide, true?

22 A I have no idea.

23 Q You have no idea where this document
24 came from?

25 A I have no idea about whether he

1 consults for whoever.

2 Q So you're going to rely on this.

3 Where did you get this document?

4 A I think it was actually given to me by
5 Willcox & Savage for me.

6 Q Okay. So the lawyers sitting next to
7 you in this deposition gave you a document that you
8 don't know the origins of that talks about data that
9 can be unreliable and you're going to rely on it for
10 your opinions today?

11 MR. BISHOP: Wait. I object to the
12 characterization. It's from the SEER data,
13 you know that, so don't mischaracterize it.

14 MR. HARTLEY: I didn't mischaracterize
15 anything.

16 BY MR. HARTLEY:

17 Q Go ahead, sir.

18 A As far as I know, it's valid, it's
19 part of the portfolio, it's not the sole reliance
20 paper that I'm using, I just take it at face value.

21 Q You got this, you don't know anything
22 about Mr. Ory, he's Dr. Ory, although except for
23 that he's a consultant in epidemiology if you trust
24 what it says on this piece of paper, right? Do you
25 know anything about him?

1 A No, I don't know him specifically.

2 Q Okay. You don't know whether anybody
3 checked this paper to see if the numbers even add
4 up, right?

5 A No.

6 Q As far as you know, it is not peer
7 reviewed, true?

8 A I don't know whether it's been peer
9 reviewed or not.

10 Q It wasn't published in the scientific
11 literature?

12 A Yes.

13 Q You agree with me it was not
14 published?

15 A Yeah.

16 Q Okay. The only thing you know about
17 it is is that you got it from a lawyer?

18 A Yes.

19 Q And you don't know what the lawyers
20 told the consultant to do, right?

21 A Correct.

22 Q Okay. But you still want -- you do,
23 you do rely on this?

24 A Well, it's SEER data and I don't think
25 its SEER data is SEER data.

1 Q And that's the same SEER data that we
2 talked about a little bit earlier that's been
3 documented upon occasion to be inaccurate?

4 A Well, if you take -- yes, okay, on
5 occasion.

6 Q Bertram Price is another person who
7 you offer two articles on which he is the first
8 author that you rely on?

9 A Yes.

10 Q Dr. Price is a statistician, true?

11 A Yes.

12 Q He's someone who works in an area
13 outside of yours? In the sense that he does --

14 A He's not a pathologist.

15 Q -- risk assessment and the like?

16 A Yes, yes.

17 Q Okay. He published these articles, is
18 it fair to say that like with the meta analyses you
19 understand the conclusions, it makes sense to you,
20 but you're not really qualified to criticize the
21 methodology that he uses?

22 A Well, the precise statistical
23 methodology, no.

24 Q Okay. Dr. Price is someone who
25 consults for Union Carbide?

1 A I don't know.

2 Q That's something that you should know,
3 shouldn't it, shouldn't you?

4 A I don't think so, I think the peer
5 reviewed papers of Bertram Price, he's, as I
6 understand, well respected as a statistician, so I
7 have no reason to question the data.

8 MR. HARTLEY: Okay. We need to take a
9 break to change the tape.

10 THE VIDEOGRAPHER: Going off the
11 record. The time is 2:50 p.m. This is the
12 end of tape four.

13 (Whereupon, off the record.)

14 (Whereupon, resumed.)

15 THE VIDEOGRAPHER: We're back on the
16 record. The time is 2:56 p.m. This is the
17 beginning of tape five.

18 BY MR. HARTLEY:

19 Q We were talking about some of the
20 reliance materials. Finished talking about the Ory
21 analysis.

22 I wanted to, doctor, do you know who
23 Dr. Roggli is?

24 A Yes, and I'll probably be seeing him
25 in about two weeks.

1 Q Okay. And where are you going to see
2 him?

3 A In Denver at the U.S.-Canadian
4 Pathology Meeting.

5 Q Okay. You know that Dr. Roggli from
6 time to time consults for Union Carbide in cases,
7 right?

8 A I believe so.

9 Q Okay. He's someone whose work you
10 rely on in your, in your reliance materials, right?

11 A Yes.

12 Q Dr. Pinkerton, he also consults for
13 Union Carbide?

14 A I don't know whether he does or not.

15 Q Okay. You don't know one way or the
16 other?

17 A No.

18 Q The Mellon Institute you refer to,
19 that was an organization on which Union Carbide had
20 staff members, true?

21 A I don't know whether they had staff
22 members in the Mellon Institute, they might have
23 done that.

24 Q Okay. The Mellon Institute did some
25 early studies of Calidria for Union Carbide, right?

1 A Yes.

2 Q The Mellon Institute was at the
3 University of Pittsburgh -- oh, no -- it was in
4 Pittsburgh at Carnegie Mellon University ultimately?

5 A Probably, I don't know its precise
6 geographical location.

7 Q In all honesty, it wasn't quite like
8 that. There was Carnegie University and then the
9 Mellon Institute became part of it at some point
10 later on, but that's not for here or there.

11 Dr. Churg, Andrew Churg, right?

12 A Yes.

13 Q He consults for Union Carbide and
14 other asbestos companies, true?

15 MR. BISHOP: If you know.

16 A I don't know. Again, I'll be meeting
17 him again in Denver in a couple of weeks.

18 Q Well, maybe you can ask them.

19 A I think it's his business what his
20 does.

21 Q Okay. You would agree with me that
22 it's important to know potentials for biases, true?

23 A Yes, it's useful to know potential for
24 biases but, you know, Dr. Churg and Dr. Roggli
25 they've been publishing for years. I think their

1 methodologies have been open to scrutiny for years.
2 Their studies have been open to scrutiny for years.
3 I think on the whole they're reasonable, I wouldn't
4 agree with everything they've ever said, but they
5 wouldn't agree with everything I've ever said.

6 Q Okay. The amphibole hypothesis rests
7 on, at least in part on the central versus
8 peripheral distinction identified by McDonald et
9 al., true?

10 A Well, the hypothesis was generated a
11 lot longer before than that. You're bringing that
12 into, the amphibole hypothesis applies to it, but
13 the amphibole hypothesis came out of Cardiff in the
14 mid-eighties.

15 Q Okay. It wasn't until, it wasn't
16 until McDonald wrote that letter to the Editor in
17 Science that the hypothesis became to be based on
18 the Canadian data, true?

19 A Which letter are you talking about
20 now?

21 Q There was a letter from --

22 A What date was it?

23 Q What's that?

24 A What date was it?

25 Q I don't know. Do you know, what is it

1 did the McDonald's contribute through their
2 central-peripheral articles?

3 A Well, they showed interestingly that
4 if you, the central mines had more tremolite than
5 the peripheral mines and the disease was more
6 significant in the central than the peripheral
7 mines.

8 Q Okay.

9 A And it fitted with the fact if you
10 think that the amphibole hypothesis is valid, the
11 data fitted with that. The actual amphibole
12 hypothesis came out I think at Cardiff in the
13 eighties and it was because of the selective
14 retention of amphiboles compared to chrysotile and
15 it was Wagner.

16 Q Okay. Okay. With that, with that I
17 want to talk to you about the Canadian data.

18 Dr. McDonald should be able to
19 identify which mines were central and which were
20 peripheral, right?

21 A I don't know whether he actually would
22 because it was a team reporting on that paper and he
23 may be relying on somebody on his team to identify.

24 Q Someone on the team should be able to
25 identify it, true?

1 A Yes, I would expect.

2 Q And that should even be true today
3 because we can't, it's only been 10 years since
4 those papers were published more or less, true?

5 A They were within the late '97, '98,
6 that sort of period.

7 Q Right. So we should be able, that
8 data should be preserved especially given the
9 importance of that data in the debate that's going
10 on in the scientific community, true?

11 A I don't know. It's difficult because
12 McDonald is quite old now, he's, although he's what
13 you would call semi-retired, I think he's in his
14 eighties. He's moved around a bit, I don't know
15 necessarily when you get to that stage that you
16 maintain all bits of data, I don't know.

17 Q If none of the authors of the
18 central-peripheral mine series of articles can
19 identify which are central and which are peripheral,
20 that gives you concern, doesn't it?

21 A It would give me some concern, yes.

22 Q And because that central-peripheral
23 issue is significant in saying, in showing that
24 correlation?

25 A Well, that's one element.

1 Q That's the only element in their
2 articles, isn't it?

3 A No, it's not the only element. I
4 mean --

5 Q Well, their articles are not new,
6 otherwise, they would just be reviewing what other
7 people said. The importance of McDonald's work is
8 the statistical data that they offer, true?

9 A Yeah, but you have to go back a lot of
10 years into the seventies when McDonald was looking
11 at the Canadian chrysotile mines then and finding a
12 very low number of mesotheliomas and it didn't dawn
13 on them that it might be related to tremolite. An
14 analysis of the lung tissues was done by Pooley in
15 Cardiff, my colleague, who found the tremolite and
16 that's what set the sort of investigations off in
17 terms of looking at tremolite.

18 Q I understand that part of it, and the
19 importance, you have to be able to identify which
20 are central and which are peripheral to correlate
21 the level of tremolite with the level of disease,
22 don't you?

23 A Well, they also had fiber burden
24 studies on which the fiber burden studies matched up
25 with their concept of central versus peripheral.

1 Q But the only way to know what central,
2 to know what the importance of any fiber burden
3 study is to know which mine they worked in and
4 whether that was central or peripheral, isn't that
5 true?

6 A Well, if they correlated together the
7 disease and the fibers in the lung, it's useful to
8 know the mine that they were in, but it's not
9 essential to the hypothesis. It's still showing
10 that the amphibole hypothesis works.

11 Q How can it show that the amphibole
12 hypothesis works if they don't know which mines the
13 people worked in, central versus peripheral?

14 A Because, if you look at the lung
15 tissue and you find more tremolite in those areas,
16 those places where the mesotheliomas came from where
17 they didn't, and you find more tremolite and the
18 same level of chrysotile, that tells you it's the
19 amphibole that's important.

20 Q I understand that part, the part I'm
21 getting at is: How do you -- you have to know where
22 someone worked for this to use this theory, don't
23 you?

24 A No, no, you look at the lung tissue,
25 you don't -- you could just take.

1 Q You can't -- well, let me stop you
2 because I think we agree on this. You can't just
3 look at the level of lung tissue and say this person
4 was central or peripheral, can you?

5 A No, what you can say is this guy has
6 got higher tremolite and the other's got low
7 tremolite.

8 Q Right. But if they worked in the same
9 mine, you couldn't take any, you couldn't take any
10 correlation from that, true?

11 A If they worked in the same mine, no.

12 Q Right. So you need to know where they
13 worked, true? That's what I've been saying.

14 A No, no, you're looking at, you've got
15 three elements; location, tremolite, chrysotile,
16 disease, you want to see what does the disease
17 correlate with.

18 Now, if you haven't gotten any fiber
19 burden data, the central versus peripheral is
20 important insofar as, if you know geologically that
21 there's more tremolite in the central versus the
22 peripheral, and you're seeing more disease in the
23 central than the peripheral, it correlates with the
24 tremolite.

25 If you're not sure about the location

1 but you have fiber burden, you have fiber counts in
2 the lungs, and they correlate with the
3 mesotheliomas, the tremolite and not the chrysotile,
4 it's telling you that it's tremolite's the problem.

5 Q Okay. I don't disagree with anything
6 you just said except for the conclusions because you
7 have -- and I want to ask you some questions so I'm
8 just telling you where I'm coming from.

9 What kind of data do you think that
10 the McDonald's work on central versus peripheral
11 mines was based on, air monitoring or tissue data?

12 A I think it was probably based on some
13 geological information because I don't think there
14 was any air monitoring data with regard to
15 tremolite.

16 Q Isn't it true that the articles that
17 they, the McDonald et al. published were based on
18 tissue data?

19 A Well, I'd have to go back to the paper
20 to see what it says, I thought that some of it came
21 from geology.

22 Q Well, some of the things that would
23 make it more, make it difficult to rely on the
24 McDonald data would be if people, if people moved
25 from mine to mine, central to peripheral and the

1 like, right?

2 A Yeah, but you wouldn't, you know,
3 you'd have a much more mixed fiber burden. You
4 wouldn't have the patent from the fiber burden in
5 that regard if they were moving around all over the
6 place because you then have mesotheliomas occurring
7 randomly through the mines in terms of if it's, so
8 that you wouldn't see that correlation with the
9 tremolite because they've been effectively exposed
10 to high tremolite in one, low in another and in a
11 sort of random way.

12 Q You're suggesting that you believe
13 there was a correlation done to check to see that
14 fiber burdens were similar other than for tremolite
15 in the people that were surveyed in those --

16 A Well, they measured chrysotile and
17 tremolite in the lungs.

18 Q Right.

19 A And any other amphibole that was
20 there.

21 Q You're not suggesting that they
22 actually controlled for and excluded cases where the
23 pattern of, the pattern of fiber burden was
24 dissimilar to most for a particular mine category,
25 are you?

1 A Not as far as I know.

2 Q Okay. I asked you about this earlier.

3 This is the, one of the, this is the second in the
4 series of Ilgren and Chatfield articles in the
5 Indoor+Built Environment and on page 19 of that
6 document it says that, they say "Coalinga
7 chrysotile, a naturally occurring, amphibole-free,
8 short fiber chrysotile, is probably mineralogically
9 the purest sample ever to be tested experimentally
10 and contains virtually no long fibers," and then
11 they cite to an article that they have in
12 preparation. Do you see the underlined portion
13 there?

14 A Yeah.

15 Q That article should have been in
16 preparation when they wrote that, right?

17 A Yeah.

18 Q If they didn't, it gives you some
19 concern as to what they're relying on?

20 A Well, in preparation it could mean a
21 lot of things. In preparation it could mean that
22 they got a piece of paper with a few things written
23 down on it or it could be that it's already 20, 30
24 pages long and they're still working on it. In
25 preparation covers, you know, a big range.

1 Q They should have found something that
2 supports the statement that they're citing to their
3 in preparation article for, right?

4 A Yes.

5 Q They should have had at least enough
6 information to make the claim that it's the purest
7 sample of chrysotile ever found, right?

8 A Yes.

9 Q Now if they didn't, that would be a
10 real problem with relying on their work, wouldn't
11 it?

12 MR. BISHOP: Objection to form.

13 A It's one little bit of the work. They
14 may be relying on the other studies that had been
15 done on the Coalinga.

16 Q They're using, in fact, some of the
17 data from Pinkerton et al's work, right?

18 A Yeah.

19 Q Pinkerton, of course, published at
20 least one thing that contradicts their statement
21 there that it's all short fiber, true?

22 A Yes, if you look at the air samples,
23 yeah.

24 Q And if when you publish a paper like
25 this, if there's contrary data, you should at least

1 let people know about it, true?

2 A Yes.

3 Q Especially if you know about it?

4 A Yes.

5 Q And you're using there the data from

6 that scientist and your claims contradict that

7 scientist?

8 A Well, I'd, you know, I'd like to read
9 the rest of it to see if they actually comment on
10 that anyway.

11 Q Have you read the rest of it?

12 A I have, I read all of these but, you
13 know, I don't remember the exact minute detail of
14 each page.

15 Q That's, in fact, that's one of the
16 dangers of just reading an article like this when
17 it's not in your area, if they say something's in
18 preparation, you trust them to have it in
19 preparation, right?

20 MR. BISHOP: Objection.

21 A Yes, but as I say, you know, in
22 preparation means it could be a lot of good
23 intentions.

24 Q Right. But you just have to take this
25 at face value because it's, because it's not your

1 area and you don't know whether they ever did it,
2 right?

3 A They would not be the first authors
4 that actually wrote down in a paper referred to
5 something in preparation and the thing's never been
6 finished and published.

7 Q Did you note when you read these
8 articles that their tables don't add up?

9 A I didn't note that, no.

10 Q That's something that would be
11 important to note when they're missing animal data
12 and such, right?

13 MR. BISHOP: Objection. Vague and
14 ambiguous.

15 A Yes, I, I could look back again and
16 see where they don't add up, I didn't pick that up.

17 Q So if the tables don't add up it gives
18 you some concern too, right?

19 MR. BISHOP: Same objection.

20 A Well, I think it's the overall thrust
21 of the paper that's important.

22 Q But when you have a situation where
23 the tables don't add up and where they don't publish
24 things that they claim are in preparation -- this is
25 hypothetical, of course, we'll deal with the proving

1 it later -- where the authors claim to have
2 credentials that they don't, when you put all that
3 together, if that were, in fact, the facts, you
4 wouldn't want to rely on these articles, would you?

5 MR. BISHOP: Objection. Calls for
6 speculation.

7 A I think is what the, you look at the
8 data within the articles, if there's some bits of it
9 not quite correct but the overall thrust makes
10 sense, then I think it's reasonable to rely on.

11 Q Okay.

12 A I mean you could probably take a lot
13 of papers and pick holes in every one of them.

14 Q And that's your basic philosophy as to
15 how you look at science, right, you look at it,
16 there could be a few problems with it, but you may
17 or may not rely on it depending on various factors?

18 A Yes, it depends on, as I say, does it
19 fit with other data, other findings plausible, do
20 they draw conclusions that from the data that the
21 data don't sustain.

22 Q Drawing conclusions about cancer end
23 points from rats who have very short lifespans is
24 problematic, isn't it?

25 A There's limitations, yes.

1 Q Especially when the, when the same
2 animal also, if you're going to, at least if we're
3 comparing it to humans, we may know a lot about how
4 asbestos affects rats from these papers, if they're
5 accurate, but to draw conclusions to humans you need
6 to be very careful given the many limitations of
7 rats including their lifespan, including the
8 difficulty of doing large numbers of, having large
9 numbers of animals in the studies, the difference in
10 the physiologic response to asbestos fibers and the
11 difference in the defense mechanisms, right?

12 A Yeah, there are problems with animal
13 studies but they do provide useful information and,
14 you know, there's a hierarchy of tests, if you like,
15 the weakest are the in vitro studies where you just
16 take test tubes and play with cells and manipulate
17 them with particles. You then come up to in vivo
18 experiments and then injection experiments have
19 limitations which are more severe than the
20 inhalation limitations. And then, of course, you
21 work up to the epidemiology studies which
22 particularly if they are supported by things like
23 fiber burden data become much stronger.

24 Q Okay. We don't have any fiber burden
25 data as it relates to Calidria for humans, right?

1 A Correct.

2 Q We know that the rats here were in
3 their papers there weren't very many of them, right?

4 A Correct.

5 Q Similarly, similar to an epidemiologic
6 study, if you don't have a lot of animals in a
7 study, you can't make very strong conclusions about
8 what they show, true?

9 A Well, the animals are different
10 because you're pumping them in much higher doses to
11 get results and, therefore, if you don't get results
12 it indicates that it's not very strongly pathogenic.

13 Q Right.

14 A We might not eliminate every
15 possibility but it would indicate that it's weak
16 pathogenicity, because you're using high doses. In
17 an epidemiology study the doses would be much lower.

18 Q The Ilgren and Chatfield study showed
19 cellular changes consistent with precursors to
20 cancer, didn't they, in the rats?

21 A Yes, they showed some cellular changes
22 which are similar cellular changes to what you would
23 get with a lot of other materials.

24 Q Some of those materials cause cancer?

25 A And some don't.

1 Q Right. Asbestos outside of the rat
2 arena is known at least to some people to cause
3 cancer, true?

4 A If you're talking about the amphiboles
5 versus chrysotile, yeah.

6 Q Okay. Well, there's also a lot of
7 people who believe that chrysotile causes several
8 kinds of cancer, right?

9 A Some people believe that, yeah.

10 Q Now, you reference Tossavainen, do you
11 know that article, are you familiar with it?

12 A Yes.

13 Q Why do you reference it?

14 A Because there was discussion that
15 based on chrysotile, Chinese chrysotile caused
16 mesothelioma. It was a paper by Yano et al.

17 Q Okay.

18 A And that purported that the chrysotile
19 didn't contain any amphibole. Tossavainen did
20 studies on the mineralogy of the chrysotile in
21 Canada and also some lung burden studies in workers
22 exposed.

23 MR. BISHOP: So the record's clear,
24 you mean in China?

25 THE WITNESS: In China, yes.

1 MR. HARTLEY: I understood that, but I
2 appreciate that.

3 Q What we also know from Tossavainen is
4 that there's no way to determine that Tossavainen is
5 talking about the same, the same sources of asbestos
6 in China that Yano was, true?

7 A I don't know whether they were exactly
8 the same or not.

9 Q And the only way that Tossavainen
10 would have any burden on Yano -- any bearing on
11 Yano's results is if Tossavainen surveyed the same
12 sources of asbestos that the Yano cohort was exposed
13 to, true?

14 A Yes, but the Yano article did not
15 provide any information on an analysis of the
16 chrysotile fibers. Also, and also --

17 Q Are you sure?

18 A I think he just said that it was
19 amphibole free.

20 Q Are you sure that they didn't provide
21 a citation for the --

22 A We can look at it again.

23 Q Do you have it with you?

24 A Yeah.

25 Q No, you don't rely on it, shockingly.

1 It's your belief that the reason you'd
2 rely on Yano is because -- I mean on Tossavainen is
3 because Yano didn't look at the issue of
4 contamination, fair?

5 A Yes.

6 MR. BISHOP: I'm sorry, that's his
7 belief?

8 A Could I amplify that or do you --

9 Q No.

10 MR. BISHOP: Yeah, you sure can.

11 Q You can do it on yours, you can do it
12 on when he asks you questions.

13 MR. BISHOP: You can finish your
14 answer and he can move to strike.

15 A Well, I can tell you the problems with
16 the Yano paper. There was no lung burden study in
17 either of those cases. The one was a latency of 13
18 and a half years, which is extremely short and most
19 people wouldn't take that into the ballpark of the
20 range for appropriate latency. And secondly one was
21 a peritoneal mesothelioma which always bothers me in
22 somewhere like China where the pathological workup
23 may not be that great.

24 MR. HARTLEY: Objection:

25 Nonresponsive. Move to strike.

1 BY MR. HARTLEY:

2 Q This is the paper you're referring to,
3 the Yano paper, Cancer Mortality Among Workers
4 Exposed To Amphibole-Free Chrysotile Asbestos?

5 A Yes.

6 Q Okay. You'd expect a paper like this
7 to have some supporting data for the amphibole-free
8 statement in the title, right?

9 A Yes.

10 Q Just like you'd expect that from
11 Ilgren and Chatfield, right?

12 A Yes.

13 Q Okay. And -- actually, here I'm
14 highlighting the --

15 A I can see it.

16 Q You can see it?

17 A Kohyama?

18 Q Right. So you can see here that they
19 identified the amphibole, evidence of the amphibole
20 contamination there and it was looked at down to
21 0.01 percent?

22 A Well, I think he's only used four
23 commercial samples. You'd actually need to know
24 whether those four commercial samples, what did they
25 represent in total, were they, did they differ over

1 time, was the, in the two mines was there any moving
2 around of ferreous excavation of the fibers because
3 it may not be uniform through the mine.

4 Q So what we -- so you've now realized
5 that they did provide some evidence in the paper --

6 A Right.

7 Q -- to support their contention, right?

8 A Pretty thin, yeah.

9 Q Much thicker than Ilgren and
10 Chatfield, true?

11 A Only four samples, yes.

12 Q Now you in terms of looking at the
13 litigation report here that you -- how many
14 commercial samples did your colleague test in giving
15 his statement that Calidria was amphibole free?

16 A Well, he looked at commercial samples.
17 He also looked --

18 Q One, right, one sample?

19 MR. BISHOP: Let him, let him finish.

20 A He also looked at the actual, took
21 samples from the mine itself over several locations.
22 He also looked at the feed going into the plant and
23 he looked at, as well as the product, he looked at
24 the tailings.

25 Q Okay. How many commercial samples did

1 he look at, sir?

2 A I think it was one, but.

3 Q Right. So that's three less than were
4 discussed here in the Yano paper, true?

5 A Well, that's in terms of commercial
6 samples, you've got to -- the Chinese who were
7 working -- you actually have to take all the other
8 samples as well. You have to see if there's a
9 likelihood of problems.

10 Q How many samples -- how is it that
11 you've come to the belief that chrysotile from
12 Canada contains tremolite?

13 MR. BISHOP: Objection.

14 Q How many samples are you relying on
15 for that?

16 A Well, the data from the actual mines
17 and the fiber burden.

18 Q How many samples is that?

19 A If you want the best information in
20 terms of whether something is contaminated by
21 tremolite in this particular instance, the best
22 thing is to look at lung tissues in people who have
23 been exposed to the chrysotile where you have --
24 where you're wondering whether there is any
25 tremolite.

1 Q You would agree with me, wouldn't you,
2 sir, that the, that the Tossavainen paper stands for
3 nothing more than Tossavainen looked at some
4 asbestos and found, found amphibole contamination,
5 true?

6 MR. BISHOP: Objection.

7 Mischaracterizes the results.

8 A He told me he looked at chrysotile in
9 China from China.

10 Q Right.

11 A He looked at samples of chrysotile
12 from China and he also looked at some lung tissues
13 from subjects who have been exposed to those --

14 Q Right.

15 A -- samples and found amphibole.

16 Q And it would not be responsible
17 scientifically to suggest that Tossavainen
18 implicates that the chrysotile that was used by the
19 Yano cohort was contaminated, would it?

20 A No, but we can't count construe the
21 Yano paper is actually showing that it's not
22 contaminated.

23 Q Well, the peer reviewers thought they
24 could because it got past peer review, didn't it?

25 A Yes.

1 Q Okay. They did provide evidence that
2 the chrysotile was amphibole free and they stated
3 what it was?

4 A Well, again --

5 Q Yes?

6 A -- it's a statement.

7 Q Yes?

8 A There's no actual data in it.

9 Q And -- well, they provide information
10 as to who, where they're getting their data as you
11 would in a peer reviewed paper, true?

12 A Where it came from I'm not aware that
13 that was published.

14 Q No, it's not, it says Personal
15 Communication actually.

16 A Yes. It's personal communication.

17 Q Okay.

18 A So he's not open to scrutiny.

19 Q That's fair. I agree with you on
20 that.

21 Now, on the other hand, with these
22 papers that you rely on from Ilgren and Chatfield,
23 there's no data to support their --

24 A That it's amphibole free?

25 Q Yes.

1 A Not in that paper.

2 Q Not in any of them, isn't that true?

3 A In the Ilgren papers.

4 Q And we've talked about the -- we've
5 talked about Coleman, right? Coleman says that
6 there's amphiboles in the area but not necessarily
7 in the mine, right?

8 A I can read the exact sentences if you
9 want.

10 Q Is that what essentially that says?

11 A Yes, in the area.

12 Q Right.

13 A Bordering.

14 Q Now one thing that you might want to
15 look at in the area of the mine where that asbestos
16 would be the tremolite content in the air, true?

17 MR. BISHOP: I'm sorry, that
18 mischaracterizes what Coleman said, he didn't
19 say the area of the mine, he said the
20 boundary of the deposit which happens to be
21 several miles --

22 MR. HARTLEY: Bruce, just make an
23 objection, don't testify here, you know
24 better.

25 MR. BISHOP: Well, I'm sorry, you're

1 the one mischaracterizing the testimony.

2 A Why don't I read it out to say what it
3 actually said while we're --

4 Q You don't need to read, you don't need
5 to reread it, it says what it says. Would you agree
6 with me that that says that it's in the area; yes or
7 no?

8 A Let's get the right phraseology. It
9 says a very minor amount of tremolite is present
10 along the boundaries of some of the tectonic
11 inclusions which were in the New Idria Serpentinite.

12 Q Okay. So there are tectonic
13 inclusions within the New Idria Serpentinite, yes?

14 A Yes.

15 Q And that's where the tremolite is
16 found, right?

17 A It says along the boundaries of some
18 of the tectonic inclusions, yes.

19 Q Within the New Idria Serpentinite?

20 A And it says --

21 Q Yes?

22 A -- it is important to note that no
23 amphibole asbestos has been reported in any of the
24 mineralogical studies made of the New Idria asbestos
25 deposits.

1 Q And the sum total of those are Mumpton
2 and Thompson, true?

3 A Well, you --

4 Q Answer my questions, don't argue with
5 me.

6 A Well, you just asked me to say what it
7 says, did it say this, I'm telling you what it said.

8 Q You're arguing with me now, I just
9 want to, what do they cite to you? Let me see it
10 again and I'll tell you what they cited to you and
11 we can agree to it.

12 Mumpson and Thompson 1975, right?

13 A Yes.

14 Q Campbell et al. 1978, have you
15 reviewed that document?

16 A It's different than the other one I
17 think, isn't it?

18 Q Right.

19 A Is it on -- can I check the list? I
20 can't remember.

21 Q Yeah, sure, you can. I don't think
22 you've reviewed that one.

23 No, you have Campbell 1980 but not
24 Campbell 19 --

25 A Okay, it's not the same.

1 Q Okay. So you don't know what that
2 document says other than he's cited it here, right?

3 A As off the top of my head, no, I think
4 I probably read it at some point but I don't recall
5 now.

6 Q But you're not relying on it today
7 because you didn't bring it?

8 A Correct.

9 Q Okay. And did you bring Mumpson and
10 Thompson? You might have.

11 A We have to go back to the list.

12 Q No, you didn't. So you're not relying
13 on Mumpson and Thompson?

14 A Well, I have read Mumpson and Thompson
15 but I didn't bring it.

16 Q Okay. And you don't know what methods
17 they looked to see if there was amphibole fiber
18 there or if they even tried?

19 A I can't recall exactly now what they
20 did.

21 Q Okay. And then Wicks and O'Hanley,
22 are you familiar with that article?

23 A No, I'm not.

24 Q You don't know what they said about
25 tremolite in the area, right?

1 A I don't know that particular paper.

2 Q Getting back to where we were a minute
3 ago. One thing to look at in the area of the mine
4 in -- of the mine anyway would be is there tremolite
5 in the air, right?

6 A Yes, you could look at that.

7 Q That's one of the things that they did
8 to identify tremolite contamination in Canada, isn't
9 it?

10 A The --

11 MR. BISHOP: You asked that earlier.

12 A How that was identified was looking at
13 lung tissue.

14 MR. HARTLEY: Well, maybe I did and he
15 didn't answer it then.

16 BY MR. HARTLEY:

17 Q Well, did they sample the air in
18 Canada that you know of?

19 A I'm not sure that there are any air
20 samples of tremolite in Canada.

21 Q Okay. Would air samples near the mine
22 be something that would be helpful?

23 A They might be helpful.

24 Q Finding tremolite there would give you
25 some concerns about whether the New Idria

1 Serpentinite body was tremolite free, true?

2 A Well, you have to do it by electron
3 microscopy.

4 Q Of course, because, because that
5 tremolite fiber is too thin to be seen without an
6 electron microscope?

7 A It's not only that, but if you used a
8 phase contrast, you might find fibers over 5 microns
9 but they may not be respirable, they may be too
10 thick to get into the lung in which case they're not
11 important. You also have tremolite that varies in
12 its geology from flake-like forms to thick fibers to
13 thin fibers, so the characterization would be
14 important to do an electron microscopy. Also you'd
15 actually have a precise chemical characterization of
16 the fiber so you would know it's tremolite and not
17 something else.

18 Q So one thing you might want to do is
19 contact the federal government to see what kinds of
20 asbestos they're finding in the area of the mine,
21 true?

22 A It would depend on what sort of
23 studies they've done and where they have taken their
24 samples from. The area could cover a whole mishmash
25 of things.

1 Q You might want to test the air near
2 the mill too to see when it was in operation to see
3 what sorts of asbestos was being released into the
4 air, true?

5 A It would have been useful.

6 Q So Dr. Hans Weill?

7 A Yes.

8 Q Someone who is consulted extensively
9 in litigation, true?

10 A Yes.

11 Q Someone who consults for defendants in
12 asbestos litigation?

13 A I assume, I don't know whether he
14 consults with both sides or who he precisely
15 consults with, I don't know.

16 Q Well, you know that he -- there are
17 some folks who, some defendants in asbestos
18 litigation made products that contained chrysotile
19 and that it's helpful to those defendants to blame
20 amphibole as the cause of asbestos, right?

21 A Well, that means your interpretation.

22 Q Well, you know that, don't you?

23 A Well, I know there's a difference in
24 potency between amphibole and chrysotile, therefore,
25 if it's a product ID thing, it's important what the

1 product contains.

2 Q You have a pre-publication article by
3 somebody named N. White, are you familiar with that
4 article?

5 A Yes, it's a follow-up of the South
6 Africa epidemiology study.

7 Q Where did you get the pre-publication
8 copy?

9 A Actually I think, I think Joyce Wood
10 may have sent it to me.

11 Q It came from the lawyers?

12 A Yes, but it's consistent with all the
13 other South African stuff that's come out.

14 Q Okay. So one of the lawyers who
15 coordinates the defense of Union Carbide sent you a
16 pre-publication study that you're relying on for
17 your opinions today?

18 MR. BISHOP: Wait a minute, I think
19 that mischaracterizes.

20 A Let me see.

21 MR. BISHOP: Do you have a copy of it
22 there, doctor? What number is it?

23 MR. HARTLEY: It's very close to the
24 end, number 119.

25 MR. BISHOP: It's available on the

1 Internet, you can pull it down right now if
2 you'd like.

3 MR. HARTLEY: Are you representing,
4 Bruce, that you pulled it down from the
5 Internet or you got it from whoever White is?

6 MR. BISHOP: I did not get it from
7 White, I got it from the Internet.

8 A It's quite common now to put
9 pre-publication papers on the Internet.

10 Q Okay. Regulatory Toxicology and
11 Pharmacology, are you familiar with that journal?

12 A I've read articles in that journal.

13 Q You're aware that there was some, some
14 concerns in the academic world that that journal was
15 too close to industry?

16 A I'm not aware of that.

17 Q Do you understand that industry
18 finances the journal?

19 A No.

20 Q That would be important to know,
21 wouldn't it?

22 A Yes, but if you think that the study's
23 biased by the industry.

24 Q It would be, there must be some
25 concern in the scientific community if multiple

1 scientists sign a letter to the editor complaining
2 about their editorial policies, true?

3 MR. BISHOP: Objection. It calls for
4 rank speculation.

5 A Can you show me --

6 MR. HARTLEY: You strongly object,
7 too, right?

8 MR. BISHOP: Absolutely.

9 A Can you show me the letter because --

10 Q Sure.

11 A -- I'd like to know who the scientists
12 were.

13 Q Does it matter who the scientists are?

14 A Well, it could be important.

15 Q How would it be important to you?

16 A Because they may not be so scientific.

17 Q Okay. Who are the non-scientific
18 scientists that you can think of?

19 A I don't want to go into names at the
20 moment.

21 Q Are you going to name them if you see
22 them on this paper, on this letter?

23 A Well, you can show me the letter and
24 I'll give you my opinion on it and see what it says.

25 (Reviews.)

1 MR. KELLY: Why don't we go off the
2 record?

3 THE VIDEOGRAPHER: Going off the
4 record. The time is 3:36 p.m.

5 (Whereupon, off the record.)

6 (Whereupon, resumed.)

7 THE VIDEOGRAPHER: This is the end of
8 tape five.

9 (Whereupon, off the record.)

10 (Whereupon, resumed.)

11 THE VIDEOGRAPHER: We're back on the
12 record. The time is 3:38 p.m. This is the
13 beginning of tape six.

14 BY MR. HARTLEY:

15 Q Okay. Just as this column points out,
16 I have this on the doc -- on here, I didn't happen
17 to bring it with me in paper format. I'm going to
18 blow up it for you, but I've got the whole page
19 here. You see there's, I think it says
20 Correspondence about Publication Ethics and
21 Regulatory Toxicology and Pharmacology, do you see
22 that?

23 A Yeah.

24 Q I'll blow it up for you to make it
25 bigger for you.

1 Okay. Do you see that? Did I read it
2 right?

3 A Yes.

4 Q That's the journal in which this
5 pre-publication paper you have from Neil White was
6 apparently published, right?

7 A Yes.

8 Q In the prelude here it says "In this
9 issue the IJOEH," that's a journal, right?

10 A Yes.

11 Q It's a peer reviewed journal, true?

12 A Yes.

13 Q "Is publishing correspondence
14 concerning conflicts of interest, lack of
15 transparency, and absence of editorial independence
16 of the Journal of Regulatory Toxicology and
17 Pharmacology, or RTP," is that what it says?

18 A That's what it says.

19 Q Okay. If a journal doesn't have
20 editorial independence transparency and it has
21 conflicts of interest in the editorial board, that
22 would be important to know?

23 A Yes.

24 Q Okay. Now -- and it goes on to talk
25 about, it talks about the letter, it says "In a

1 letter," and the letter follows this, "In the letter
2 dated November 19, 2002, the Center for Science in
3 the Public Interest, CPSI, and over 40 scientists,
4 including this IJOEH editor, call on Elsevier Press,
5 the publisher and owner of RTP, to hold the journal
6 accountable to norms of publication ethics and to
7 require greater independence of the journal from IS,
8 ISRTP," which is the International Society for
9 Regulatory Toxicology and Pharmacology. Did I read
10 that right?

11 A You did.

12 Q Okay.

13 A So they say basically -- this was in
14 2002 or 2001?

15 Q This is in 2002.

16 A Because it says Elsevier is November
17 27, '02 reply contests many of the points made in
18 the letter.

19 Q Right.

20 A But agrees to implement a policy on
21 conflicts of interest and disclosure for RTP.

22 Q Okay. Right. And then it says IJOEH,
23 which is the journal that this letter was published
24 in, was chosen to publish this exchange in order to
25 alert readers to the ways in which supposedly

1 credible peer reviewed journals may be co-opted by
2 corporations seeking to give credibility to
3 particular scientific points of view. RTP publishes
4 a large number of studies conducted by
5 industry-funded scientists. These studies later
6 become part of industry efforts to influence federal
7 regulatory agencies or to defend litigation claims
8 concerning toxic exposures. Without safeguards to
9 assure the independence of the editorial process,
10 suspicion, some of it well-deserved, is cast over
11 such studies and journals." Signed the
12 Editor-In-Chief. Did I read that right?

13 A You did.

14 Q Okay. Were you aware of this
15 controversy?

16 A No.

17 Q Okay. So you didn't -- so you weren't
18 aware that the journal that published this article,
19 and I think some others that you rely on, had some
20 issues about conflicts of interest at one time?

21 A Well, that was in 2001 --

22 Q 2002.

23 A -- 2002.

24 Q Okay. Yeah. Now, do you know who
25 Philip Landrigan is?

1 A Yes.

2 Q He's a respected scientist, true?

3 A He works in Mount Sinai I think.

4 Q Do you respect his work?

5 A Up to a point.

6 Q At what point don't you respect it?

7 A Well, I think in some ways his

8 opinion, the facts don't get in the way of his

9 opinion.

10 Q For instance?

11 A Oh, I think on the chrysotile issue

12 for example.

13 Q Okay. So you disagree with him about

14 chrysotile?

15 A Yes.

16 Q Okay. Olav Axelson, Professor

17 Emeritus, Division of Occupational and Environmental

18 Medicine, Department of Molecular and Clinical

19 Medicine, Faculty of Health Sciences in Linkoping

20 University, Sweden, somebody you, is that a crazy,

21 crazy scientist who you don't respect?

22 A Yeah, I don't know him so I mean I

23 don't know.

24 Q Do you know who John Balbus is?

25 A No.

1 Q Gary Cohen?
2 A No.
3 Q Devra Davis?
4 A No.
5 Q Devra Davis is at the Heinz School at

6 Carnegie Mellon University, is that a wacky
7 environmentalist group or something?

8 A I don't know anything about the Heinz
9 School but, you know, I only knew that they made
10 baked beans.

11 Q And ketchup, right?
12 Russell Doolittle at the University of
13 California, San Diego, is that someone who the
14 signature to this, this letter concern --

15 A I, I don't know him, so.

16 MR. BISHOP: Why do we have to go
17 through this?

18 A I don't know these chaps.

19 MR. BISHOP: What relevance does it
20 have to what we're discussing today?

21 MR. HARTLEY: It has a lot of
22 relevance in terms of seeing what he knows
23 about the journals that you give him so that
24 he can offer his opinions that you give to
25 him. That's what it goes to.

1 BY MR. HARTLEY:

2 Q Mr. Bishop and his colleagues did not
3 give you any information about the problems with
4 this journal, did they?

5 A That relates to 2001 and 2002, we're
6 now in 2007.

7 Q Do you think that they fixed it?

8 A I would expect them to have fixed it.

9 MR. BISHOP: Assuming they ever had a
10 problem.

11 Q You saw that the --

12 MR. HARTLEY: You should really
13 refrain from testifying here because it's
14 inappropriate as you know, it's frustrating
15 to listen to this, I'm sure, but stop doing
16 it.

17 BY MR. HARTLEY:

18 Q Did you see that they instituted an
19 editorial policy after this letter was written
20 according to the, according to the beginnings of
21 this letter?

22 A I have not followed this particular
23 debate, I wasn't involved with it in the beginning
24 so I don't know the precise things.

25 Q I understand that. You saw that this

1 published letter that the editor for the journal,
2 the IJOEH, International Journal of Occupation --
3 Occupational and Environmental Health, indicated
4 that a policy was instituted after the initial
5 letter was written, you saw that?

6 A I don't know if -- did you read that,
7 I don't recall.

8 Q They said that -- we did read it
9 together, let's mark it.

10 Do you know who Eva Hansen is?

11 A No.

12 Q Okay. That's not someone who gives
13 you concern about signing this letter, right?

14 A Well, I don't know who she is.

15 Q Okay. Do you know who Gio Gori is?

16 A No.

17 Q Not someone that you turn to for, one
18 way or the other you trust them or don't trust them?

19 A I don't know anything about them.

20 Q Now I want to talk to you very briefly
21 about the response.

22 MR. HARTLEY: There's a response here,
23 and I'll make this the next exhibit which
24 would be Exhibit 8 I think we haven't marked,
25 identified 6 and 7, 6 I think is your

1 objections and 7 is the cross-notice that you
2 guys filed. We'll make as Exhibit 8 this
3 correspondence which I will provide
4 electronically to the court reporter so you
5 can have the whole thing.

6 (Document titled Special
7 Contributions, Correspondence about
8 Publication Ethics and Regulatory Toxicology
9 and Pharmacology marked as Exhibit 8, as of
10 this date.)

11 BY MR. HARTLEY:

12 Q It says here, and I'll represent to
13 you that this is the response to the -- RTP
14 responded to the letter that I showed you that we've
15 talked about and then said "We have instituted a
16 policy to address some of these things and we don't
17 think that some of the things that the signatories
18 to that letter were correct on some of those
19 things."

20 And then the authors to the original
21 letter write back and they say "We received your
22 letter dated January 23 conveying the Conflict of
23 Interest Disclosure Policy for Regulatory Toxicology
24 and Pharmacology. As Elsevier considers the
25 question of general conflict of interest disclosure

1 policy for its journal it owns, we strongly
2 discourage using the RTP policy as a model. The
3 policy has numerous deficiencies including
4 disclosure by authors is voluntary, not mandatory.
5 There is no declaration that the author discloses
6 will, in fact, be published -- disclosures will, in
7 fact, be published with the article. There is no
8 explanation of what, if any, procedures the editors
9 will use to determine which disclosures, if any,
10 will/will not be used and will not be published.
11 Disclosure is limited to employment affiliation and
12 financial or material support only for the
13 particular paper submitted. This means that a
14 scientist who routinely consults for industry or
15 provides expert testimony for industry but received
16 no industry support for the particular paper would
17 not be required to disclose those other ties."

18 Okay. Those are things that are
19 potential weaknesses in a conflict of interest
20 disclosure policy, true?

21 A Potential weaknesses, yes.

22 Q Okay. And you don't know anything
23 about whether the authors of the white paper in RTP
24 if there were any disclosures at all, right?

25 A Well, if you give me the paper I can

1 tell you if there's any published disclosures, I
2 don't know.

3 Q It's here somewhere. There it is.

4 A (Reviews.)

5 Well, it comes from the National
6 Institute of Occupational Health which is government
7 funded in South Africa.

8 Q Okay.

9 A There's no mention of any conflicts,
10 but it, you know, comes from the Public Health
11 Service there.

12 Q Okay.

13 MR. BISHOP: That's my other objection
14 why this is all irrelevant.

15 BY MR. HARTLEY:

16 Q The next point that I hadn't gotten to
17 yet that we'll talk about, it says "An author's
18 disclosure of his or her government affiliation is
19 deemed sufficient, however, this ignores the fact
20 that some government science is co-sponsored by
21 industry." That's true, isn't it, some government
22 science is co-sponsored by industry?

23 A Yes, that's probably true.

24 Q Have you ever worked on any such
25 science?

1 A No.

2 Q You don't know whether that's the case
3 there, do you?

4 A Not -- I don't know anything about the
5 funding, I assume it's National Institute for
6 Occupational Health. It's a reasonable way of doing
7 it.

8 Q Okay. Other problems that they
9 identified with the policy of that journal after the
10 initial exchange and creation of a conflicts of
11 interest policy, the policy is silent on the matter
12 of authors identifying and affirming their specific
13 roles in the production of the paper. That's
14 important as we talked about so you can identify who
15 did what in the document, isn't it?

16 A Well, generally if you read a paper,
17 you're not precisely sure which author did which
18 bit. I mean you can make a calculated guess if you
19 like in terms of, you know, that if there's
20 pathology, it would generally be the pathologist who
21 did it; if it's statistics, it will be the
22 statistician who did it, and that sort of thing, but
23 it, you know, usually these are, these are teams of
24 people and, you know, roles overlap.

25 Q Okay. They identify another problem.

1 "The policy is silent on the practice of editors
2 having financial interest in the manuscripts they
3 are asked to judge." That's a potential problem,
4 isn't it?

5 A Yeah, that's potential problem.

6 Q If a scientist at a tobacco company, a
7 scientist at the tobacco company is reviewing an
8 article on tobacco smoke, it could be a problem,
9 right?

10 A It could be. It may not be, it could
11 be.

12 Q We don't, sitting here today, you
13 don't know anything about that journal and whether
14 it's, whether it's addressed these issues or whether
15 they did or not?

16 A All I know is this paper is very
17 consistent, it provides consistent findings with
18 other papers that came out of South Africa were from
19 different authors.

20 Q If you found out these sorts of things
21 about a journal that was publishing literature,
22 would you be willing to raise these issues in the
23 scientific community so there could be a debate on
24 it like these authors did of this letter?

25 A That's a reasonable thing they did.

1 Q Okay. So -- well, that's fine.

2 That's good enough.

3 Now, I asked you, I did mention
4 something else.

5 You're familiar with a journal called
6 The Lancet, right?

7 A Yes.

8 Q Okay. I just happen to have this one
9 handy too. This is, this is an article from The
10 Lancet, you see it's Lancet 2005 365:804 through
11 809, do you see that?

12 A Yep.

13 Q Okay. The Lancet is a well-respected
14 journal in the U.K.?

15 A Yes, I don't know where it gets its
16 funding from, I don't know whether there are people
17 on the editorial board who have conflicts of
18 interest but it is a respected journal.

19 Q Well, this one in this particular
20 situation they're identifying the journal in which
21 Ilgren and Chatfield published as a journal with
22 close ties to the tobacco industry, do you see that?

23 A Yes.

24 Q Okay. And that's something that would
25 give you concern because of your knowledge of the

1 tobacco industry's approach to science, true?

2 MR. BISHOP: Objection. I don't think
3 it's fair to ask him a general question if he
4 hasn't read it.

5 A I don't know. The tobacco industry's
6 approach to science probably changed over periods of
7 time, I don't know what it precisely is at this
8 point in time.

9 Q You know that for years they would
10 stand up and raise their right hand and say tobacco
11 doesn't cause cancer when the evidence that they had
12 in their shops was that it did, true?

13 A Yes.

14 Q That gives you some indication,
15 doesn't it?

16 A Well, things change, you know, we're
17 talking about several decades ago. I think people's
18 approach to things have changed over the years.

19 Q One thing that was mentioned in the
20 letter that we looked at, the conflict of interest
21 letter, was that it, that the disclosures, that it
22 might be important to disclose that you have an
23 affiliation with someone who might benefit from your
24 paper but they didn't fund the paper itself, that's
25 something that you'd agree with, right?

1 A Well, that gets into a very
2 complicated issue because, you know, you could go
3 back to Dr. Hammar and so on and, you know, Dr.
4 Hammar does a lot of litigation work, should he
5 actually when he's doing his study, which wasn't
6 funded by any particular group of people, list every
7 person he's consulted with?

8 Q Well, you know that Ilgren and
9 Chatfield didn't disclose their work for Union
10 Carbide in their papers, right?

11 A Yes.

12 Q These papers would be, if they were
13 true, would be somewhat helpful in the defense of
14 Union Carbide in Calidria cases, true?

15 A Yes.

16 Q You know that, you testified in a case
17 that was pending during the time some of these
18 papers were published by these guys, right?

19 A Yes. You see, I'm not sure that when
20 those were published that there was in many journals
21 a conflict of interest policy.

22 Q By the year 2002 there was a conflict
23 of interest policy?

24 A Well, that probably went in in 2001,
25 didn't it?

1 Q Right. But you knew it was pretty
2 common in the industry to not in the industry?

3 A You know, I haven't studied this
4 conflict of interest thing chronologically but it's
5 really in the last few years that it's become a
6 major thing.

7 Q Okay. But they should have disclosed
8 that they testified on these very issues, shouldn't
9 they?

10 A I don't know, I mean I don't know what
11 the policy was at that time.

12 Q From a moral perspective, according to
13 you, do you think they should have disclosed that
14 they earned substantial money from Union Carbide in
15 testifying about the very issues that are discussed
16 in these papers?

17 MR. BISHOP: Objection.

18 MR. KELLY: I'm going to object, we're
19 not offering Dr. Gibbs for moral issues.

20 A I have no opinion on that at that
21 particular point in time, I don't know the precise
22 circumstances.

23 Q Have I eroded your willingness to rely
24 on these papers at all today?

25 A No.

1 Q None whatsoever?

2 A I know you're a very persuasive
3 person, but no.

4 Q Okay. Let me just, just we'll go
5 through this briefly because I wanted to make sure
6 that we all are on, we understand that there's, it's
7 not just my opinions about this journal, some peer
8 review researchers have come to the conclusions
9 about the journal in which Ilgren's and Chatfield's
10 papers were published.

11 It says "Using evidence from tobacco
12 industry documents we examined the industry's
13 associations of the society's executive" --

14 A So sorry, where are you now?

15 MR. BISHOP: Right here.

16 Q "The Journal's editor and board and
17 the extent to which the journal publishes papers on
18 environmental tobacco smoke that would be deemed
19 favorable by the tobacco industry. Society's
20 executive has been dominated by paid consultants to
21 the tobacco industry. All six editorial -- all six
22 members and seven of the eight members in 1992 and
23 seven of the eight members in 2000 had financial
24 associations through industry lawyers; 67 percent of
25 the editorial board in 1992 and 66 percent in 2002

1 had histories of financial associations with the
2 tobacco industry; 61 percent, 40 out of 66 of the
3 papers related to environmental tobacco smoke
4 published in the Indoor+Built Environment in the
5 study period reached conclusions that could be
6 judged to be industry positive." Did I read all
7 that correctly?

8 A Well, that's what it says, yeah.

9 Q Does that sound like there might be a
10 conflict of interest to problem on the editorial
11 board there?

12 MR. BISHOP: Objection. Again, I
13 don't think it's fair to read him two
14 sentences of the abstract for something he's
15 not familiar with and ask him for an instant
16 analysis.

17 A It may be, it may indicate a potential
18 conflict of interest, I don't know, you know,
19 whether to what degree these chaps were consultants.
20 I mean, you know, it doesn't actually quantify
21 anything there. But, you know, if you look at a
22 journal on Indoor+Built Environment, you can
23 actually be interested in studies of articles that
24 take place indoors and environmental tobacco smoke
25 would be a big element of that that you -- these

1 sort of people would be interested in looking at.

2 Q Inhalation Toxicology, do you know
3 that journal?

4 A Well, I've read papers in Inhalation
5 Toxicology, I don't know what context you mean do I
6 know that journal, the same way as I know other
7 journals.

8 Q Okay. Do you know anything about its
9 association with industry?

10 A No.

11 Q Would that be important?

12 A I don't actually follow the links to
13 industry with any of these journals, I know industry
14 funds a lot of research, sometimes it funds it
15 directly, sometimes it gives it to government to
16 fund research in an independent way, I don't know
17 the details of these associations.

18 Q In today's world it's expected amongst
19 scientists that a meaningful disclosure of conflicts
20 of interest will occur when a paper is published,
21 true?

22 A Nowadays, yes.

23 MR. HARTLEY: Okay. Let me see if
24 there's anything else, I think we're done,
25 but.

1 Let's take five minutes off the
2 record.

3 MR. BISHOP: Okay.

4 MR. HARTLEY: I may have a couple more
5 questions but I may not, so.

6 THE VIDEOGRAPHER: Going off the
7 record. The time is 4:02 p.m.

8 (Whereupon, off the record.)

9 (Whereupon, resumed.)

10 THE VIDEOGRAPHER: We're back on the
11 record. The time is 4:08 p.m.

12 BY MR. HARTLEY:

13 Q Have you reviewed any articles by Dr.
14 David Egilman?

15 A Yes, I've read articles by
16 Dr. Egilman.

17 Q Do you have any special reaction to
18 them?

19 A Yes, I break out in spots usually.

20 Q Black spots?

21 A It must be the name Egilman did that
22 to me.

23 Q You've heard of Dr. David Egilman?

24 A I have, yes.

25 Q You break out in spots --

1 A Yes.

2 Q -- when you read his articles?

3 What is it about his articles that
4 cause to have spots?

5 A They cause a major hypersensitivity
6 reaction in me.

7 Q Why?

8 A Because they're very biased articles,
9 they're very destructive articles, they're not at
10 all constructive, they don't ever publish original
11 research, it's usually mainly the critique of
12 others.

13 Q Okay. Which ones are you thinking of
14 that fit those, that gives you the spots?

15 A Well, I think most of what I read of
16 Egilman's, and ABC is one of them, but.

17 Q Okay. We've talked about a lot of the
18 concepts that were discussed in that article,
19 haven't we, today?

20 A Yes.

21 Q And what makes you break out in spots
22 is the way in which the critique is delivered, true?

23 A Yes, and the misrepresentation of some
24 of the studies.

25 Q Okay. Well, you know, you know from

1 reading that article that Dr. Egilman contacted the
2 authors of the 1997 McDonald et al. article that you
3 rely on, it's -- where is it -- Chrysotile,
4 Tremolite and Carcinogenicity to find out if they
5 could identify the central versus peripheral mines,
6 right?

7 A That's what you're telling me.

8 Q Well, do you --

9 A I don't know what Dr. Egilman did
10 personally or what conversations he's had with
11 anybody.

12 Q That's what was reference -- that's
13 what was represented in the published peer reviewed
14 article that you read called ABC, right?

15 A That's what was represented, whether
16 that was correct or not I don't know.

17 Q Are you friends with Dr. McDonald?

18 A I know Dr. McDonald, I worked with
19 Dr. McDonald, and yes, I am friends with
20 Dr. McDonald.

21 Q So you could call him up and ask him
22 if he'd been contacted by Dr. Egilman, right?

23 A Yes, although it's not something I
24 thought to do.

25 Q Okay. You could, you could call him

1 up and find out if the potentially valid criticisms
2 of the work that they couldn't identify which mines
3 were central and which were peripheral whether it
4 was true that that couldn't be done, couldn't you?

5 A Well, I could potentially call him up
6 but he had a very severe accident crossing the road
7 with a motor bike last year and I'm not quite sure
8 exactly what shape he's in these days.

9 Q Okay. Nonetheless, you could find
10 out?

11 A Well, I would, I would have to be very
12 sensitive about it and I would not want to pursue
13 somebody who's maybe not as fit as he was.

14 Q You could ask his wife who was a
15 co-author?

16 A Alison McDonald, yes.

17 Q You could ask all the other authors
18 who contributed to that literature if they were able
19 to help you with that because you know a lot of
20 them, right?

21 A I know Graham Gibbs.

22 Q Okay.

23 A Case I know as well.

24 Q Bruce Case?

25 A Yes.

1 Q What about some of the French speakers
2 in that crowd, there's several of them, isn't there?
3 Well, you know Liddell?

4 A I think, I think Liddell is deceased
5 now actually. I have met him twice at meetings but
6 I wouldn't say I knew him as such.

7 Q Okay. Now we did talk about the
8 issues that relate to the dose data from Canada,
9 right?

10 A Yes.

11 Q Those are things that are set forth in
12 detail in Dr. Egilman's ABC article with cites for
13 the propositions he identifies?

14 A Yes, there are some cites.

15 Q And if you check those cites, you'd
16 find that, you believe you'd find that what he says
17 about them is true, right?

18 MR. BISHOP: Objection. Calls for
19 speculation.

20 A I think there's some misrepresentation
21 in the article and I'd have to go back and look at
22 it again to tell you what those specifics were.

23 Q You'd expect, you'd expect lawyers who
24 were cross-examining Dr. Egilman to find those
25 because lawyers find those things all the time in

1 litigation, don't they, when there's misstatements
2 in papers?

3 MR. BISHOP: Objection.

4 A I don't know have an opinion on how
5 good lawyers are on their cross-examination, apart
6 from certain limited examples I don't have a history
7 of watching them do it.

8 Q Have you ever been shown by lawyers
9 mistakes that you've made?

10 A I've never been shown mistakes that
11 I've made but I'm sure I do make mistakes.

12 Q Okay. Have we identified all of the
13 evidence that you have that Calidria is amphibole
14 free?

15 A I believe so.

16 Q The only sensitive test for that that
17 you referenced would be the one done by Dr. Pooley,
18 true?

19 A Yes.

20 Q And you're not familiar with air
21 monitoring data from the area where the mine is,
22 true?

23 MR. BISHOP: Already asked and
24 answered.

25 A I'm not familiar, no.

1 Q Do you know who William Dyson is?

2 MR. BISHOP: This sure sounds a lot
3 more like several more than two questions.

4 A I don't know him.

5 MR. HARTLEY: You know how it goes.

6 A I think he's basically an occupational
7 hygienist.

8 Q He's someone that you rely on from any
9 of his published work?

10 A There's no specific article I'm
11 relying on his I don't think in this case, or these
12 cases.

13 Q Dr. Craighead, do you know who he is?

14 A Yes, I've been friendly with Dr.
15 Craighead for some years.

16 Q Do you rely on his work at all? Well,
17 it's not cited here, so I'm not going to go into it.

18 If it's not here, you don't need to
19 rely on it, right?

20 A Well, if we're talking about Calidria,
21 this pretty well covers it.

22 Q Okay. What is your hourly rate?

23 A \$500 per hour.

24 Q How long have you been doing it at
25 that rate?

1 A Two years maybe, one to two years
2 something like that.

3 Q Has your income changed in the last
4 few years as it relates to your asbestos consulting
5 work?

6 A Yeah, as I say it's about hundred
7 twenty K or something in the last few years, before
8 that it would have been less and a few years before
9 that it would have been less again.

10 Q Are you doing more testimony now than
11 you used on your mind, or is it just the higher
12 rate?

13 A Probably the higher rate but also
14 you've got the dollar-pound change is worst now than
15 it was and et cetera, et cetera, you know.

16 Q I'm sure you could find a good lawyer
17 to help you with that.

18 Did you charge for your flight, the
19 time that you were on your flight over here and the
20 like?

21 A Yes, I will do.

22 Q Were you working on that time or were
23 you catching a little snooze?

24 A I wish I was catching a snooze, I was
25 catching up on some of these papers.

1 Q Which ones did you have to catch up
2 on?

3 A Let me read now. I read the South
4 African paper. I read some of this EPA document.
5 If you give me the list, I might be able to give you
6 a good --

7 I read the Bernstein article. The
8 Boutin article. I glanced at the BAOH article. I
9 read the Camus I think. I had to look at the Churg,
10 some of the Churg papers. I mean I had to look I
11 suppose at about 15, 20 percent of these.

12 Q Okay. How long did it take you to
13 look at 15 to 20 percent of the 121 articles that
14 you brought?

15 A Well, you know, some I skimmed, some I
16 read in more detail. I worked for several hours on
17 the plane probably about -- I did actually snooze
18 for about an hour and I probably read for about
19 four.

20 Q Okay. Do you feel like -- do you feel
21 like after talking to me that you have any questions
22 about some of the data that you're relying on, its
23 reliability?

24 A I think I form my own opinion on my
25 judgment of the papers, I don't find myself unduly

1 influenced by the way you've made the questions
2 today.

3 Q Okay. The uncertainties with respect
4 to dose data that underlies your potency opinions is
5 not undermined by the lack of data to support the
6 papers that you rely on for those opinions?

7 MR. BISHOP: Object to the
8 characterization.

9 Go ahead.

10 A It's no different in dose calculations
11 than it was some years ago. In epidemiological
12 studies of occupational exposures to particles of
13 any sort, the exposure data isn't as good as you
14 would like.

15 Q There was one thing I didn't
16 understand. Why do you have -- why do you rely on
17 Fleischer/Drinker? It's on your list.

18 A I can't remember, I don't think I do
19 rely on it actually. It will probably come out.

20 Q The list was created by someone else?

21 A Yes, it was forwarded to me to make
22 suggestions of additions, deletions and somehow I
23 skipped over that one and I -- it's not something
24 that I would use I think.

25 Q As we've discussed, there are a large

1 number of articles that are on the other side of
2 this debate that you don't reference in your, in
3 your reliance materials, right?

4 A Well, I've listed the articles that I
5 relied for my opinion. Now, there are a whole
6 number of articles out there that I have read but I
7 have serious issues with which we can debate but I
8 don't, because I have serious issues with them I
9 don't rely on them.

10 Q Okay. And that one document there in
11 front of you, the Berman and Crump methodology, if
12 it has been rejected by the EPA because for lack of
13 transparency, among other things, will that cause
14 you to be concerned about relying on it?

15 MR. BISHOP: Object to the
16 characterization. Mischaracterizes.

17 A I'm not, I'm not using this as a
18 policy document, I'm using this for the information
19 that it contains in there, and I think the
20 information it contains in there to me appears
21 reliable. I don't see that there's, if you like, a
22 leaving out of important studies that would give you
23 a different opinion. I think it's a fairly accurate
24 appraisal of the literature up to that time, so what
25 the EPA decides on is policy is another issue,

1 that's not to me policy is not causation.

2 Q There's unpublished data referred to
3 in that meta-analysis, isn't there?

4 A There may be.

5 Q So you can't say that that unpublished
6 data is representative of anything because you
7 don't, you've never seen it before, all you know is
8 that it was put in there?

9 A Well, it's referred to and it's for
10 people to pour over that unpublished data if they
11 want to.

12 Q Did you review -- did you ever read
13 the Peer Consultation Workshop Discussion of this
14 document?

15 A Yes, I did, and to be honest, I can't
16 remember the precise what it said but I did read.

17 Q One of the things that it said was
18 that they left out some mesotheliomas in the
19 analysis?

20 MR. BISHOP: I'm going to object. If
21 you want to get into that --

22 Q Teta. Teta.

23 MR. BISHOP: -- then show.

24 Q You remember that Dr. Teta said
25 that -- just let me finish and then you can say you

1 don't remember it if you don't -- that Dr. Teta
2 indicated that they had left out some mesotheliomas
3 from work that she had done?

4 A I don't remember that specifically, if
5 you can point to it, I'll comment on what I think.

6 Q Okay. Do you know that the Peer
7 Consultation Workshop document that was disseminated
8 after the meeting to discuss that indicated that the
9 unpublished data was a problem and that clarity
10 without that data being disclosed they couldn't
11 check the document for accuracy?

12 MR. BISHOP: Object to that
13 characterization.

14 A I'd have to see what they precisely
15 said, what they said and what is purported to what
16 they had said may be different.

17 Q If -- without -- if there's some data
18 that's withheld so that it can't be checked, used,
19 looked at by the people who are reviewing the
20 document for that workshop, that's -- that means
21 that the review is only as good as the data that
22 they had, right?

23 A Well, you could argue if you took that
24 data out does it make any difference to the rest of
25 the document.

1 Q And you'd have to do that to know,
2 wouldn't you?

3 A Precisely, I suspect it wouldn't, but
4 I --

5 Q You don't know that because it wasn't
6 done as far as you know, true?

7 A I don't know.

8 Q Now, not having, I mean presuming for
9 a minute that there was unpublished data that was
10 not released to the people who were looking at the,
11 looking at the methodology, assume that that
12 happened, you have to know how that data affects the
13 analysis to know whether it was important that it
14 was, right?

15 MR. BISHOP: Objection. Objection.

16 Calls for speculation.

17 A You'd have to look to see what sort of
18 percentage of it it is. If it's a small percentage,
19 it probably wouldn't affect the interpretation of
20 the data. If it was a big percentage, then it may.

21 Q And without knowing that you can't
22 really comment on how accurate it is?

23 A Well, I can't comment on unpublished
24 data which I haven't seen.

25 Q Is there a good reason to refuse to

1 give the data that's being used in the methodology
2 to the people who hired you to make the methodology?

3 MR. BISHOP: Objection. Calls for
4 speculation.

5 A Again, I don't know.

6 Q It gives you concern to find out that
7 happened, doesn't it?

8 MR. BISHOP: Same objection.

9 A What happened I don't know, I don't
10 know why it wasn't disclosed or if it was, I don't
11 know what the problem was.

12 Q Clarity is important in scientific
13 work, true?

14 A Yes.

15 Q Shouldn't -- we don't want to base
16 scientific opinions when we can't, when people can't
17 check the data to see if it's reproducible?

18 MR. BISHOP: Same objection.

19 A Well --

20 MR. BISHOP: Broad. Ambiguous. Calls
21 for speculation.

22 A You know, it goes back to how much of
23 it was unpublished in this document.

24 Q And without knowing that you really
25 don't know whether that's a reliable document, true?

1 MR. BISHOP: Objection.

2 Mischaracterizes his testimony.

3 A Well, a lot of the studies that it
4 refers to I have read and I don't think they
5 mischaracterize the studies.

6 MR. HARTLEY: Go ahead, guys, I have
7 no further questions at this time.

8 MR. BISHOP: Okay.

9 EXAMINATION BY

10 MR. BISHOP:

11 Q Doctor, let me ask you a series of
12 follow-up questions.

13 You were asked a number of questions
14 about the Campbell report. Was that under the
15 auspices of the U.S. Department of Interior?

16 A Yes.

17 Q And one of the types of chrysotile
18 that they analyzed was Calidria asbestos provided by
19 Union Carbide?

20 A Yes.

21 MR. HARTLEY: You're leading, Bruce.

22 MR. BISHOP: I can lead all I want.
23 You can object.

24 MR. HARTLEY: I object. Objection:
25 Leading.

1 BY MR. BISHOP:

2 Q I'm referring to the discussion on
3 page 40. What do they say about the length of the
4 Calidria chrysotile, the COF-25?

5 A It's comprised of very short fibers
6 with 98 percent of the fibers less than 10 microns
7 in length.

8 Q Did they contrast that with the
9 chrysotile from Canada provided by Canadian
10 Johns-Manville?

11 A It says in contrast approximately
12 65 percent of the Plastibest-20 chrysotile fibers
13 exceeded 10 microns in length.

14 Q I'm not going to go into the details
15 but let me ask you this: Did the authors do an
16 X-ray defraction analysis for the various asbestos
17 types that they analyzed?

18 A Yes.

19 Q Now you were asked some questions
20 about Dr. Pooley's report of his examination of
21 chrysotile asbestos samples from the former Union
22 Carbide mine.

23 A Yes.

24 Q Presently the processing plant of
25 KCAC.

1 A Yes.

2 Q In addition to the commercial sample,
3 did Dr. Pooley take samples from the actual deposit
4 that had been mined previously by Union Carbide?

5 A Yes, he did.

6 Q And did he take samples from the
7 tailings pile that was adjacent to the mill in King
8 City?

9 A Yes.

10 Q Did he take them from various
11 locations in the mine --

12 A Yes, he did.

13 Q -- as opposed to just one location?

14 A Yes, he did.

15 Q And, in fact, is there a map that
16 shows the location within the mined area that
17 identifies the location where the samples were
18 taken?

19 A Yes, there was.

20 Q And do they correspond to particular
21 points in time when that part of the deposit was
22 mined?

23 A Yes.

24 Q Did he have a positive control for his
25 analysis, his bulk sample analysis of the Calidria

1 chrysotile?

2 A Yes, he did.

3 Q There's a mention of Bell, Bell's 7M?

4 A Yes.

5 Q Is Bell, was Bell asbestos a mine in
6 Thetford, Quebec?

7 A I understand it to be so.

8 Q And referring to the X-ray results
9 after the chemical treatment with acid.

10 A Yes.

11 Q Did he find any of the Bell 7M sample
12 to contain tremolite?

13 A Yes, he found some tremolite in the
14 Bell's.

15 Q And did he apply the same method to
16 several other chrysotile samples to assess the
17 suitability of the method that he used in assessing
18 whether there was any tremolite in the Calidria
19 samples?

20 A Yes, he did.

21 Q And what defined when he used that
22 same method on other chrysotile samples?

23 A That it was a sensitive method of
24 finding tremolite.

25 Q You were asked some questions about

1 the Berman, what was referred to as the Berman and
2 Crump Draft Risk Assessment, do you recall that?

3 A Yes.

4 Q And you were asked whether it had been
5 subjected to peer review, do you recall that?

6 A Yes.

7 Q Did the EPA request that a peer review
8 panel be constituted noticed in the Federal Register
9 to review the Berman and Crump draft?

10 A I thought that was what occurred.

11 Q And in the, actually the third page of
12 the Berman and Crump Draft Risk Assessment, does it
13 list the contributors and reviewers?

14 A Yes, it does.

15 Q And the report that you were asked
16 about just a moment ago, the Peer Review Panel
17 Workshop, was that the report of the peer reviewers?

18 A Yes, I mean it lists, you know, Teta
19 was mentioned.

20 Q You were asked some questions about
21 the Yano study, do you recall that?

22 A Yes.

23 Q Let me ask you to assume that Dr. Yano
24 has reported that, in fact, in a subsequent fiber
25 burden analysis of an employee of the same plant,

1 significantly elevated tremolite levels were found.

2 What, if anything, would that mean to you as to

3 whether the chrysotile used in that facility was, in

4 fact, contaminated with tremolite?

5 A It would suggest that it was.

6 Q Would it be consistent with the

7 results of the research by Dr. Tossavainen where he

8 found elevated tremolite in 10 bulk samples

9 originating from six different Chinese chrysotile

10 mines as well as fiber burden analyses from

11 employees of a plant utilizing Chinese chrysotile?

12 MR. HARTLEY: Objection. Assumes

13 facts not in evidence.

14 A Yes.

15 Q You were asked about others who have

16 looked at the issue of tremolite contamination and

17 Calidria chrysotile. Let me ask you to assume

18 hypothetically that -- let me rephrase the question.

19 Are you familiar with Dr. Arthur

20 Langer?

21 A Yes.

22 Q Is he an electron microscopist and

23 geologist similar to Dr. Pooley?

24 A Yes.

25 Q If I asked you to assume

1 hypothetically that Dr. Langer has testified under
2 oath that he's looked at Calidria chrysotile and
3 have found no tremolite, would that be consistent
4 with Dr. Pooley's results?

5 A It would be.

6 Q If I asked you to assume that William
7 Longo has tested Calidria chrysotile and has not
8 reported the presence of any tremolite
9 contamination, would that likewise be consistent
10 with the results in Dr. Fred Pooley's report?

11 A Yes.

12 MR. HARTLEY: Assumes facts not in
13 evidence.

14 MR. BISHOP: Hold on just a second.
15 Those are all the questions I have.

16 FURTHER EXAMINATION BY

17 MR. HARTLEY:

18 Q Dr. Longo is a reliable scientist,
19 true?

20 A Up to a point, yes.

21 Q Okay. You were willing to rely on Dr.
22 Longo in Mr. Bishop's hypothetical anyway, true?

23 A I'm not relying on it, he just asked
24 me a question if it was consistent with Dr. Pooley
25 and Dr. Langer's results and it was consistent with

1 that.

2 Q When it comes to what Mr. Bishop said
3 in those hypotheticals, you don't know that any of
4 that's true, true?

5 A I know what Dr. Pooley found because
6 there's a report.

7 Q Right. When it comes to, when it
8 comes to looking at the -- a particular fiber burden
9 analysis from a worker at the same facilities that
10 Mr. Bishop said came from the Yano stuff, finding
11 tremolite in someone's lungs in one case tells you
12 very little about that environment, doesn't it?

13 A Well, if you had a worker who had been
14 working there a period of time, and you didn't,
15 there wasn't any evidence that he'd been exposed to
16 asbestos in any other location, and you found
17 tremolite in his lung, it would suggest it came from
18 that location.

19 Q Right. There's tremolite, however,
20 outside of a mine and mill environment where someone
21 might come in contact with it, right?

22 A It's theoretically possible but there
23 are specific areas where there is tremolite in
24 stucco and so on, but if you've got a substantial
25 burden in a worker which you claim is only exposed

1 to chrysotile, the chances are that the tremolite
2 came from that.

3 Q You'd need to know before you could
4 say anything about the Yano study based on the
5 hypothetical case that Mr. Bishop mentioned where
6 Yano supposedly found tremolite in a worker from
7 that facility if that worker worked at the facility
8 during the time that the cohort was studied, true?

9 A The facility at the time of the
10 cohort, well -- well, not necessarily because unless
11 the plant changed the types of fiber that it used.

12 Q Right, and you'd need know to that,
13 true?

14 A Yes, you would need to know that.

15 Q And you don't know anything about
16 that?

17 A No, I don't know about that.

18 Q And you can't get that from any of the
19 documents you brought to me today, true?

20 A No.

21 Q You can't tell me that Tossavainen has
22 any bearing on the asbestos that was being tested in
23 the Yano case, in the Yano article, right?

24 A I can't say specifically it did but it
25 was Chinese chrysotile from several different areas

1 and there seems to be a lot of amphibole there.

2 Q Yeah. And we know that, we know that
3 there wasn't any in the study in the four samples
4 that were tested by Kohyama, right?

5 A Well, we'd need to know the
6 methodology of the study, wouldn't we? Did he use
7 the sensitive technique in terms of detecting? I
8 know he says he can detect it to low levels, but.

9 Q He gave you a level of detection in
10 that article.

11 A Yes, but is that accurate.

12 Q And the one that your colleague did
13 didn't give you a level of detection?

14 A But he did five controls and he did
15 say below point one, 01 percent I think.

16 Q That's not, that's not for that,
17 that's for the other method, not for the method that
18 he employed that he created himself, true?

19 A I think he's -- yes, he said it would
20 have taken it down below that method, that
21 sensitivity.

22 Q So we don't know whether his method
23 was even as sensitive as what was used in Yano,
24 right?

25 A Well --

1 Q Do we?

2 A -- we don't know what the method was
3 that was used in the Yano samples.

4 Q I know, that wasn't question.

5 A We've got a personal communication in
6 which the data is anecdotal and which there's no,
7 there's nothing direct from -- what's the Japanese
8 chap?

9 Q Kohyama.

10 A -- Kohyama, there's nothing directly
11 from him.

12 Q That's what we have here, too, we have
13 a personal communication to a lawyer that was paid
14 for by the lawyer about a test that doesn't have any
15 citations for the methodology.

16 MR. BISHOP: Objection:

17 Argumentative.

18 A It's a Pooley report and I regard it
19 as reliable.

20 Q It's a personal communication from
21 Pooley to a lawyer, true?

22 A Yes.

23 Q So when Dr. Yano gets a personal
24 communication you don't rely on it but you will rely
25 on it when it comes from Dr. Pooley to a lawyer?

1 MR. BISHOP: Objection:

2 Mischaracterization.

3 A Well, you've got, you've got a
4 personal communication that's put in the article
5 written by Yano or his co-author, it's not written
6 by Kohyama. In the report, that is a personal
7 communication, it is written by Fred Pooley. Now I
8 think something directly written as a personal
9 communication is more reliable than getting from
10 somebody else what somebody else said.

11 Q Okay. So you've got a personal
12 communication from Fred Pooley to Henry Garrard but
13 you're relying on it even though it wasn't to you,
14 right?

15 MR. BISHOP: Object to the
16 characterization.

17 A It's a report, I read it.

18 Q It's a personal communication to
19 someone else that you're going to rely on just the
20 way Dr. Yano is relying on Kohyama?

21 MR. BISHOP: Objection. It's
22 argumentative. Asked and answered.

23 A I think it's different, but.

24 Q Okay. You don't -- haven't seen
25 anything from Dr. Langer on the testing that was

1 allegedly done of Calidria, right?

2 A I don't recall seeing it.

3 Q Dr. Langer is someone who testifies
4 for defendants in asbestos litigation?

5 A I thought Dr. Langer testified for
6 plaintiffs and defendants but, you know, I don't
7 know the precise detail of what Dr. Langer does, I
8 don't know his testifying history.

9 Q Okay. All right. You have no -- you
10 didn't -- you gave us all the evidence you have,
11 though, about Calidria contamination?

12 A I think so.

13 Q You've never seen anything from Dr.
14 Longo about that, have you?

15 A I don't recall seeing anything from
16 Dr. Longo.

17 MR. HARTLEY: Okay. No further
18 questions.

19 MR. BISHOP: All right. Doctor, you
20 have a right to read and review the
21 transcript or you can waive that right, you
22 just need to tell the court reporter.

23 THE WITNESS: I better read it.

24 (Whereupon, witness excused, to read
25 and sign.)

1 THE VIDEOGRAPHER: We're going off the
2 record. The time is 4:39 p.m. This is the
3 end of tape six and concludes this
4 deposition.

5 (Whereupon, off the record.)

6 (Whereupon, videotaped deposition
7 adjourned 4:39 p.m.)

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REPORTER CERTIFICATE

I, Josephine H. Fassett, a Certified Shorthand Reporter for the State of New York and Notary Public of the State of New York, do hereby certify that there came before me at Alston & Bird, LLP, 90 Park Avenue, New York, New York,

DR. ALLEN R GIBBS,

who was by me first duly sworn; that the witness was carefully examined; that said examination was reported by myself, translated and proofread using computer-aided transcription; and the above transcript of proceedings is a true and accurate transcript of my notes as taken at the time of the examination of this witness.

I further certify that I am neither attorney nor counsel for nor related nor employed by any of the parties to the action in which this examination is taken; further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto or financially interested in this action.

Dated February 28, 2008.

Josephine H. Fassett
Certified Shorthand Reporter
New York Notary Public