

FILE NAME: Texaco (TEX)

DATE: 2004 Jan 6

DOC#: TEX039

DOCUMENT DESCRIPTION: Legal - Deposition of Barry Castleman



1 SUPERIOR COURT OF WASHINGTON FOR SKAGIT COUNTY

2

3 VIRGINIA JAMESON, x
4 Individually and as Personal:
representative of the Estate:
5 of RAY JAMESON, :

6

Plaintiff, :

7

VS. : No. 02-2-01069-8

8

TEXACO, INC, et al., :

9

Defendants. x

10

11

Tuesday, January 6, 2004

12

Rockville, Maryland

13

14 DEPOSITION OF:

15

BARRY CASTLEMAN, SC.D.,

16 a witness, was called for examination by counsel for
17 the defendant, Texaco, Inc., pursuant to Notice and
18 agreement of the parties as to time and date,
19 beginning at approximately 3:00 o'clock, p.m., at the
20 Ramada Inn, 1775 Rockville Pike, Conference Room,
21 Rockville, Maryland 20850, before Ronnie C. Palmer,
22 a court reporter and Notary Public in and for the
State of Maryland when were present on behalf of the
respective parties:



**CAROL J. THOMAS STENOTYPE
REPORTING SERVICES, INC.**

3162 MUSKET COURT
FAIRFAX, VIRGINIA 22030
(703) 273-9221

1 APPEARANCE OF COUNSEL:

2 For the Plaintiff:

3 BERGMAN, SENN, PAGELER & FROCKT, ESQUIRES
 4 BY: DAVID S. FROCKT, ESQUIRE
 17530 Vashon Highway SW
 5 Vashon, Washington 98070
 (206) 463-4470

6 For the Defendant, Texaco, Inc.:

7 LANE, POWELL, SPEARS & LUBERSKY, ESQUIRES
 8 BY: BARRY N. MESHER, ESQUIRE
 1420 Fifth Avenue, Suite 4100
 9 Seattle, Washington 98101-2338
 (206) 223-7961

10 - 0 -

11 I-N-D-E-X

12 Witness: Page:

13 Barry Castleman, Sc.D.

14 Examination by Mr. Mesher 4

15 Examination by Mr. Frockt 122

16 Further examination by Mr. Mesher 128

17 - 0 -

18

19

20

21

22

1	<u>Exhibits:</u> (Original transcript only)	<u>Page:</u>
2	Defendant's Exhibit No. 1	17
3	to the Castleman deposition	
4	Defendant's Exhibit No. 2 and 3	121
5	to the Castleman deposition	
6	Defendant's Exhibit No. 4	124
7	to the Castleman deposition	
8	Defendant's Exhibit No. 5	130
9	to the Castleman deposition	
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		

1 WHEREUPON,

2 BARRY CASTLEMAN, SC.D.,

3 a witness, was called for examination by counsel
4 for the defendant, Texaco, Inc., and after having
5 been duly sworn, was examined and testified as
6 follows:

7 EXAMINATION BY COUNSEL FOR DEFENDANT

8 TEXACO, INC.

9 BY MR. MESHER:

10 Q This is the deposition taken pursuant to
11 notice and taken pursuant to the Civil Rules. You have
12 had your deposition taken before. Is that correct?

13 A Yes.

14 Q You know the question and answer format?

15 A Yes.

16 Q And that you are supposed to answer
17 audibly as opposed to a nod of the head or uh-huh?

18 A Yes.

19 Q And if at any time during the deposition
20 you don't understand the question that is being
21 asked, would you let me know so that I can attempt to
22 rephrase it?

1 A Yes.

2 Q If you answer a question, I will
3 understand that you understood the meaning. Do you
4 understand that?

5 A Sounds reasonable.

6 Q Okay?

7 A Yes.

8 Q When were you first retained in this
9 case?

10 A Sometime last year. I don't remember
11 when.

12 Q Do you recall the month or spring,
13 summer, fall?

14 A No.

15 Q What were you asked to do?

16 A Well, initially I was told that this was
17 a case in which Texaco was the defendant, and the
18 relationship to the plaintiff as employer, and that
19 it was unusual case in that it was not product
20 liability or premise owner liability type of case.

21 So, the burden of proof that the
22 plaintiff bears in this case was explained to me much

1 more articulately than I can relate it to you.

2 But I was told to expect that there would
3 eventually be the need to write a report and probably
4 be deposed before the case came to trial. So, all of
5 this has come now to pass.

6 Q What is your understanding is the burden
7 of proof?

8 A Again, my understanding is far from
9 perfect, but I gather that the plaintiff had to show
10 that the defendants -- that the defendant had
11 knowledge that the conditions the plaintiff was
12 exposed to or that the class of workers that
13 plaintiff was a member of were exposed to were highly
14 likely to cause death and/or disease to members of
15 such group of workers.

16 Q Okay. And you prepared a declaration in
17 this case? Is that right?

18 A I did.

19 Q Were you asked to do anything other than
20 to prepare the declaration?

21 A Well, I think at some point I read a
22 deposition of a company official. That's all I can

1 recall.

2 Q You also reviewed Dr. Houston's
3 declaration? Is that right?

4 A I was shown that this afternoon on the
5 way over here from lunch. Yes.

6 Q Looks like you had a comment or two about
7 Dr. Houston's declaration. There are some
8 interlineations on that declaration. Did you do that
9 or did someone else?

10 A I don't know what you're talking about.
11 I first saw this first thing about an hour ago.

12 MR. FROCKT: I would be happy to clarify.
13 You want to stay on the record?

14 BY MR. MESHER:

15 Q You didn't do the highlighting on this?
16 Is that right?

17 A No.

18 Q How about the handwritten
19 interlineations?

20 A No.

21 MR. FROCKT: We showed that to Dr.
22 Castleman. And, of course, if counsel for Texaco is

1 happy to have it reviewed, we can do so without
2 waiving client-attorney work product or privilege.

3 BY MR. MESHER:

4 Q When you read or reviewed Dr. Houston's
5 declaration, did you have any comments about it?

6 A Well, I was just interested that he
7 really didn't seem to dispute what I was saying. In
8 this one part. It was part eight where he says
9 referring to my declaration and says while the
10 literature cited in the Castleman declaration
11 generally reported the growing knowledge of risks
12 associated with asbestos exposure none of them
13 concluded or provided data from which one might
14 reasonably conclude that an oil refinery worker
15 exposed to asbestos in the course of his occupation
16 was certain to contract -- contract mesothelioma or
17 any or asbestos-related disease including lung
18 cancer, asbestosis, or asbestos-related pleura
19 diseases.

20 I thought that was a pretty weak response
21 because all he was basically saying was just because
22 you show that these people are likely to develop one

1 asbestos disease or another still you have not shown
2 that any of these individuals were definitely going
3 to develop any of these diseases. I thought that was
4 a lame response.

5 Q Did you agree with what he said, though?

6 A Yes. I don't -- You can't say in advance
7 when workers are exposed to asbestos which ones are
8 going to get mesothelioma or lung cancer.

9 Q Not everyone who is exposed to asbestos
10 is going to get asbestos-related diseases, correct?

11 A Right.

12 Q The body has certain defense mechanisms
13 to preclude the first inhalation of asbestos fibers
14 into the lungs, correct?

15 A Right. If the fibers are large enough to
16 be removed because they are basically
17 non-respiratory. They can be taken out in the nose
18 or upper respiratory tract. If they are inspired
19 into the lungs, there are lung-clearing mechanisms
20 where they may be removed from the body without
21 causing injury. And then there are the ones that
22 stick around or move around in the body and may cause

1 injury.

2 Q And even the asbestos fibers that what
3 you have termed stick around in the lungs don't
4 necessarily result in an asbestos-related disease,
5 correct?

6 A That's correct.

7 Q Or an asbestos-related injury? Is that
8 correct?

9 A Well, I don't know. If they stick around
10 in the lungs and cause scarring, even if it's not the
11 kind of scarring that can be identified in any kind
12 of gross way, I think it might be argued reasonably
13 they contributed to or are a part of an injury to the
14 lung.

15 Q Not all the asbestos fibers in the lungs
16 cause scarring, do they?

17 A The ones that stick around a long time I
18 they can probably cause some damage.

19 Q How about chrysotile?

20 A I am not an authority on the pathology of
21 asbestos. I would certainly defer to people like Dr.
22 Hammer on questions like that. I am not testifying

1 injury.

2 Q And even the asbestos fibers that what
3 you have termed stick around in the lungs don't
4 necessarily result in an asbestos-related disease,
5 correct?

6 A That's correct.

7 Q Or an asbestos-related injury? Is that
8 correct?

9 A Well, I don't know. If they stick around
10 in the lungs and cause scarring, even if it's not the
11 kind of scarring that can be identified in any kind
12 of gross way, I think it might be argued reasonably
13 they contributed to or are a part of an injury to the
14 lung.

15 Q Not all the asbestos fibers in the lungs
16 cause scarring, do they?

17 A The ones that stick around a long time I
18 they can probably cause some damage.

19 Q How about chrysotile?

20 A I am not an authority on the pathology of
21 asbestos. I would certainly defer to people like Dr.
22 Hammer on questions like that. I am not testifying

1 injury.

2 Q And even the asbestos fibers that what
3 you have termed stick around in the lungs don't
4 necessarily result in an asbestos-related disease,
5 correct?

6 A That's correct.

7 Q Or an asbestos-related injury? Is that
8 correct?

9 A Well, I don't know. If they stick around
10 in the lungs and cause scarring, even if it's not the
11 kind of scarring that can be identified in any kind
12 of gross way, I think it might be argued reasonably
13 they contributed to or are a part of an injury to the
14 lung.

15 Q Not all the asbestos fibers in the lungs
16 cause scarring, do they?

17 A The ones that stick around a long time I
18 they can probably cause some damage.

19 Q How about chrysotile?

20 A I am not an authority on the pathology of
21 asbestos. I would certainly defer to people like Dr.
22 Hammer on questions like that. I am not testifying

1 injury.

2 Q And even the asbestos fibers that what
3 you have termed stick around in the lungs don't
4 necessarily result in an asbestos-related disease,
5 correct?

6 A That's correct.

7 Q Or an asbestos-related injury? Is that
8 correct?

9 A Well, I don't know. If they stick around
10 in the lungs and cause scarring, even if it's not the
11 kind of scarring that can be identified in any kind
12 of gross way, I think it might be argued reasonably
13 they contributed to or are a part of an injury to the
14 lung.

15 Q Not all the asbestos fibers in the lungs
16 cause scarring, do they?

17 A The ones that stick around a long time I
18 they can probably cause some damage.

19 Q How about chrysotile?

20 A I am not an authority on the pathology of
21 asbestos. I would certainly defer to people like Dr.
22 Hammer on questions like that. I am not testifying

1 injury.

2 Q And even the asbestos fibers that what
3 you have termed stick around in the lungs don't
4 necessarily result in an asbestos-related disease,
5 correct?

6 A That's correct.

7 Q Or an asbestos-related injury? Is that
8 correct?

9 A Well, I don't know. If they stick around
10 in the lungs and cause scarring, even if it's not the
11 kind of scarring that can be identified in any kind
12 of gross way, I think it might be argued reasonably
13 they contributed to or are a part of an injury to the
14 lung.

15 Q Not all the asbestos fibers in the lungs
16 cause scarring, do they?

17 A The ones that stick around a long time I
18 they can probably cause some damage.

19 Q How about chrysotile?

20 A I am not an authority on the pathology of
21 asbestos. I would certainly defer to people like Dr.
22 Hammer on questions like that. I am not testifying

1 A Right. This morning, for example, I
2 spoke at a class at Johns Hopkins Hospital
3 University. The professor at the time class told me
4 that he was able to get me an honorarium of \$250 for
5 taking the time to prepare and make that
6 presentation.

7 And I get paid more for doing one hour of
8 medical legal work than I get paid for half a day of
9 working on that.

10 Q Do you have current employment other than
11 doing medical legal work?

12 A I don't know what you would call
13 employment, but for the last 25 years I have been
14 doing whatever I consider to be the best use of my
15 time and energy in the field of public health. I am
16 an independent consultant, and I have been since
17 1975.

18 Q What percentage of your time as opposed
19 to income do you spend on an annual basis on medical
20 legal issues as opposed to the other types of things
21 that you do? In work related.

22 A I don't get involved in medical legal

1 stuff other than asbestos. I mean I occasionally get
2 a phone call about some chemical, but it's rare. So,
3 basically the figures I have given you are for all
4 medical legal work.

5 Q So, about 90 percent of your time also?

6 A I would say 80 to 85 percent of my time
7 is spent on other things than medical legal work, or
8 anything else other than medical legal.

9 Q You said in your declaration at one point
10 you performed consulting work for United States
11 Occupational Safety and Health Administration?

12 A Yes.

13 Q What year or years was that?

14 A That was 1978. I was looking into the
15 possibility that OSHA regulations were causing
16 displacement of hazardous industries to other
17 countries. So, I looked at things like production
18 and imports of lead acid batteries, asbestos
19 textiles, and other products. Benzidine, dyes.

20 Q Were you looking at that as part of your
21 study, part of your education?

22 A No.

1 MR. MESHER: Now, could you mark, please,
2 the declaration as the first exhibit, sir?

3 (Castleman Exhibit No. 1 was
4 marked for identification.)

5 BY MR. MESHER:

6 Q Sir, you have in front of you what has
7 been marked for identification as Exhibit 1. And
8 that's a two-sided copy of your declaration that you
9 signed in this case. Is that correct?

10 A Yes.

11 Q Now, I want to go through it because I
12 have some questions on it for you. If you could turn
13 to page two. Under paragraph four, you make
14 reference to your doctoral thesis. Also involved
15 research based on unpublished government records.
16 The government records included workers' compensation
17 claims files. Do you see that?

18 A Yes.

19 Q Did you ever review any workers'
20 compensation files of Texaco?

21 A Not at the time I was writing my doctoral
22 thesis. I don't think I have seen any since, either.

1 Q Are you aware that there were no workers'
2 compensation claims related to asbestos presented to
3 Texaco through the time of Mr. Jameson's employee at
4 Texaco?

5 A No. I was not aware of any evidence on
6 that question one way or the other.

7 Q Okay. Number five. In addition to
8 published information, I examined unpublished
9 information available from the U.S. Government
10 Archives. The Archives of Scientists, et cetera?
11 What unpublished information are you referring to?

12 A The record of the Saranac Laboratory
13 Industrial Hygiene Foundation I was able to obtain
14 access to. The record of Dr. Arthur Vorwald at the
15 Armed Forces Institute of Pathology, former director
16 of the Saranac laboratory.

17 Those are the sorts of things I am
18 referring to here.

19 Q To your knowledge, Texaco had no
20 involvement or association with the Saranac
21 Laboratories. Is that correct?

22 A That is correct.

1 Q Saranac Laden Laboratories?

2 A Correct.

3 Q Nor with Dr. Vorwald?

4 A Correct.

5 Q Nor with Lansa? Is that correct?

6 A I am not aware of any connection with
7 Lansa and Texaco. That is correct.

8 Q When did you review any Industrial
9 Hygiene Foundation documents?

10 A I think that was about 1979 or '80.

11 Q Do you recall what documents you
12 reviewed?

13 A Mostly, it was published stuff. They had
14 by that time gone and destroyed a lot of the record
15 of their reports to individual companies. Reports of
16 the kind that so-called Hemeon Report, H-E-M-E-O-N.
17 They prepared hundreds of reports like that. And one
18 of the first things that happened when the asbestos
19 litigation came along was that in 1979, I believe,
20 they developed -- adopted the policy of destroying
21 records of that kind.

22 So, I looked at the published

1 transactions, proceedings, meetings. And I guess
2 there were a few files of things that were
3 unpublished that I found mildly interest in.

4 Q Do you have any. Texaco was not a member
5 of the Industrial Hygiene Foundation in 1979, was it?

6 A I don't know if they were still a member
7 by 1979. I know they were earlier.

8 Q You have been provided no information to
9 show that Texaco was a member in 1979. Is that
10 correct?

11 A Well, I don't really know. I just can't
12 recall having seen exactly what the years of the
13 membership were. There were lots of companies
14 members from prior years but not in 1979.

15 Q At least through this litigation, no one
16 has provided you with any information to show that
17 Texaco was a member in 1979, correct?

18 A That's correct.

19 Q Okay. What years do you believe that
20 Texaco was a member of the IHF?

21 A I don't recall. I may have checked.
22 Probably I did check my files. Let me just look

1 through this thing.

2 Q Certainly.

3 (Off the record.)

4 BY MR. MESHER:

5 Q Sir, you can feel free to look at your
6 declaration. I don't mean by asking you questions to
7 restrict you from looking at it.

8 A Of course. Yes. My records show that
9 IHF had Texas Company or Texaco as a member from 1949
10 and 1959. And this is indicated in the index cards
11 of members that were produced in the deposition of
12 director of the IHF.

13 Q You have no recollection, independently,
14 of whatever index cards were available concerning the
15 years that Texaco was a member of the IHF? Is that
16 correct?

17 A Not as to exact years. I might have
18 something in my files that speaks to that question.
19 Probably not.

20 Q Okay.

21 A But there are other documents that are
22 record -- of records in this case that indicate that

1 during the '50s that Texaco was active in the
2 Industrial Hygiene Foundation.

3 Q What documents are those?

4 A IHF documents that describe membership of
5 some of their medical committees and other
6 committees.

7 Q Do you have those here today?

8 A I don't recall if they are in here or
9 not.

10 Q Go ahead.

11 MR. FROCKT: I can point them out.

12 MR. MESHER: Sure.

13 (Off the record.)

14 THE WITNESS: The Industrial Hygiene
15 Digest was often published with a page called
16 Fundation Fct as a cover page which would include one
17 or two pages of information about the IHF and the
18 service that it was providing.

19 And so they would mention things like new
20 member companies that had joined the IHF as in 1949
21 where their transactions bulletins list Texas
22 Company, the Soconi Vacuum Oil Company, and other

1 companies as new members. And in July 1955 the
2 monthly issue of foundation facts talks about Melvin
3 Mincus, the medical director of the Texas Company as
4 a member of the medical committee of the Foundation.

5 BY MR. MESHER:

6 Q Other than 1949 to 1955, have you been
7 provided with any other documents to show when Texaco
8 was a member of the IHF?

9 A No.

10 Q Okay.

11 A Like I say, I have seen the index card
12 that says the span of years, and then two documents.
13 And that's --

14 Q You also indicate you have reviewed
15 documents from the API, American Petroleum Institute?

16 A Right.

17 Q What documents were those?

18 A Well, they include the Bonsib Report of
19 1937.

20 Q Was that part of the API?

21 A I understand it was circulated among
22 members of the API, but I understand that the

1 documentation of that is a matter of some dispute
2 about.

3 Q What evidence do you have that that was
4 an API document, the 1947 Bonsib?

5 MR. FROCKT: You mean '37.

6 BY MR. MESHER:

7 Q The '37. Excuse me.

8 A I might have seen a copy that indicated
9 that it also was circulated to members of the API. I
10 know I have seen a copy of his 1948 report which
11 indicates that it was circulated to members of the
12 API. And I believe that Herschel Hobson may have
13 seen it through his own involvement in the oil
14 industry, but I'm not sure about that.

15 Q Or Herschel involvement as the
16 plaintiff's attorney?

17 A Right. When he first saw it, I really
18 don't know.

19 Q I believe that '48 Bonsib on the top of
20 that makes reference to the API?

21 A I believe so.

22 Q But the '37 does not. Is that correct?

1 A Well, not this copy at least.

2 Q Okay. Do you have any evidence that my
3 client received a copy of the 1937 Bonsib Report?

4 A No, I don't.

5 Q Okay. Back to the API documents. What
6 documents are you referring to that you have
7 reviewed?

8 A Well, there are meetings of the medical
9 advisory committee.

10 Q Those are all contained in the notebook?
11 Is that right?

12 A That's right.

13 MR. MESHER: I think what we will do is
14 have that marked as an exhibit and get a copy at the
15 end.

16 THE WITNESS: This is my copy. I suppose
17 we can work something out.

18 MR. FROCKT: That is okay. As long as he
19 can have his copy back.

20 MR. MESHER: Sure.

21 BY MR. MESHER:

22 Q You indicate you have interviewed

1 numerous current and former leading officials in the
2 field of industrial medicine and hygiene.

3 A Yes.

4 Q Did you ever review or interview John
5 Pendergrass?

6 A The former OSHA director?

7 Q Yes, sir.

8 A I met him once at a meeting. We had some
9 words.

10 Q What kind of words did you have?

11 A He was just ending his tenure as the OSHA
12 chief. He was giving a speech about the role of
13 industrial hygienists. And there was -- and I was
14 there as an invited guest to talk about the threshold
15 of limited values and the things that I have
16 published about the limitations of the threshold of
17 limited values down in Georgia about 1989 or so. It
18 was '89.

19 And Pendergrass was asked by this young
20 woman industrial hygienist who was upset that the
21 employer that she had wasn't willing to go beyond the
22 threshold limit values in controlling exposure

1 limits. The company wasn't really willing to protect
2 workers anymore than what she thought was the minimum
3 amount of legally required protection.

4 And Pendergrass made this statement that
5 when he worked for the industry -- I think it was 3M
6 Corporation -- he was always able to persuade
7 management to do the right thing. He said you just
8 have to marshall your arguments, make a strong case.

9 And this is too much for me. I was
10 sitting in the front row. I burst out what if they
11 are just too damned cheap to spend the money. At
12 which point the person who was the moderator
13 dismissed everybody for lunch.

14 Q Who was the moderator? The moderator was
15 not John Pendergrass, was it?

16 A No.

17 Q Who was the moderator?

18 A I don't know.

19 Q Have you ever interviewed Carl Manville?

20 A No.

21 Q How about Alan Dooley?

22 A No.

1 Q You make reference to Hueper or Hueper?
2 How do you --

3 A Hueper, H-U-E-P-E-R.

4 Q He provided you with some of his -- What
5 do you call them? Memoirs? I don't mean to slight
6 that, but some his personal information? Is that
7 right?

8 A Not really. We had a number of meetings.
9 The only documentation of his I've seen is all
10 available at the National Library of Medicine,
11 history of medicine section.

12 He wrote an autobiography called
13 something like a physician in field of occupational
14 cancer, a medical Cassandra tail, and then he had a
15 list of his publications.

16 Q Did he provide you with any of his
17 private papers?

18 A Private papers?

19 Q Yes, sir.

20 A Nothing that's not at the National
21 Library of Medicine. There is one presentation I
22 recall he made to -- There are just some

1 presentations that he made that are typed up that
2 weren't, as far as I could tell, published in any
3 kind of medical journal. There were a few things
4 like that.

5 I don't know if I saw them while he was
6 alive or after he died. I went to the National
7 Library of Medicine.

8 Q Dr. Hueper believed that cigarette
9 smoking was not a cause of lung cancer. Is that
10 correct?

11 A He was skeptical about that in an article
12 published in 1954.

13 Q In more than one article. Isn't that
14 right?

15 A I don't recall articles published after
16 1955. I recall articles in which he acknowledged
17 that -- that indicated that cigarette smoking caused
18 cancer and did not take issue with that. He would
19 just list that in reviewing the literature on cancer
20 of the lung as a subject that was a matter of
21 discussion in literature.

22 Q Didn't Dr. Hueper take issue with people

1 implicating cigarettes as a cause of lung cancer?

2 A Like I say, all I remember is the 1954
3 article in which he expressed skepticism on that
4 point. And I do recall seeing other writings of
5 Hueper's in which he notes that without really
6 arguing that people have written that cancer can be
7 caused by cigarette smoking.

8 Q Do you remember Dr. Hueper in
9 Occupational and Environmental Pulmonary Cancer with
10 special reference to pneumoconiosis writing it may be
11 concluded that the existing evidence neither proves
12 nor strongly indicates that tobacco smoking and
13 especially cigarette smoking represent a major or
14 even predominant causal factor for the production of
15 cancers of the respiratory tract and are the main
16 reason for the phenomenal increase of pulmonary
17 tumors during recent decades.

18 A May I see that?

19 Q Certainly. And the next sentence says if
20 excessive smoking actually plays a role in the
21 production of lung cancer it seems to be a minor one
22 if judged from the evidence on hand?

1 A I thought you were showing me the
2 article.

3 Q Yes. You want the entire article? I
4 didn't know you wanted that.

5 A Well, I would like to see the whole
6 article. Yes.

7 Q Certainly.

8 A I am trying to ascertain the vintage of
9 this thing because it's not at all clear whether it
10 was published or if so where it was published.

11 There are references listed, but there is
12 no list of references at the end of the copy that you
13 have handed me. This might have been his
14 presentation at the 7th Saranac Symposium in 1952.
15 The literature on lung cancer as a consequence of
16 cigarette smoking, at least the epidemiology on this
17 was only beginning to develop in 1950, 1952, 1950 to
18 1952.

19 So, I can understand why he might have
20 not been totally persuaded at that time. In any
21 case, I cannot tell from looking at this thing when
22 it was written. The latest date I notice in flipping

1 through it is 1950.

2 There is trends in respiratory cancer
3 table that goes through 1950. So, my guess is that
4 this was written around 1950.

5 Q Okay. And in 1951, Dr. Hueper, do you
6 recall, also wrote on the subject of cigarette smoke
7 in the Industrial Medicine and Surgery in February
8 '51?

9 A I remember seeing the article. I don't
10 recall what he said about smoking in the article.

11 Q On page 55, the entire statistical
12 evidence as to the lung cancer hazard from tobacco
13 dust is unreliable and requires confirmation before
14 such allegations can be entertained seriously.

15 Do you recall he published words to that
16 effect?

17 A No. But I am not disputing that he did.
18 In 1951.

19 Q And then again in October of 1954 in the
20 Current Medical Digest Dr. Hueper submitted an
21 article the cigarette theory of lung cancer? Do you
22 recall that?

1 A Vaguely.

2 Q There is little, if any, medical evidence
3 advanced in support of the cigarette theory. Do you
4 recall Dr. Hueper writing that?

5 A No. Not really.

6 Q The data on hand make it unlikely that
7 cigarette smoking presents a major factor in the
8 production of lung cancer and in its recent
9 phenomenal rise in frequency. Do you recall that?

10 A No. But he's not saying it does not
11 cause lung cancer. He seems to be saying he is not
12 convinced that it's the main cause of the overall
13 rise of lung cancer that's being reported in the
14 population during those years.

15 Q Dr. Hueper in looking at the evidence in
16 support of the cigarette smoking theory stated the
17 following on page 38. The evidence in support of the
18 cigarette smoke theory of lung cancer even upon
19 superficial examination presents several serious
20 defects and inconsistencies which become even more
21 glaring when the claims advanced are critically
22 scrutinized for the scientific adequacy and accuracy.

1 Do you recall that?

2 A I don't recall the specific sentence
3 there, but I don't dispute that it is there.

4 Q And then Dr. Hueper wrote articles on a
5 lot of different claimed carcinogens?

6 A Hueper covered a lot of subjects,
7 different agents that caused cancer. Just as he was
8 skeptical at first about tobacco the cause of the
9 lung cancer, similarly he waited about five years
10 after the first German authors were writing that
11 asbestos caused lung cancer before he came down
12 firmly on that point.

13 Q Hueper wrote about causes of cancer
14 including organic soot? Is that correct?

15 A I am sure he did.

16 Q He wrote on coal tar as a carcinogen, the
17 lignite coal tar.

18 A I don't recall about lignite, but coal
19 tar fumes certainly is a material that's been
20 described in medical literature for many years as the
21 cause of cancer.

22 Q He wrote by creosote oil as a cause of

1 cancer?

2 A Again, I can recall him writing something
3 about creosote, but what he said I don't recall.

4 Q He wrote about anthracene oil as a cause
5 of cancer? Do you recall that?

6 A I don't know about anthracene oil. But I
7 think anthracene is a chemical that's been extracted
8 from tar and shown in experimental animals to cause
9 skin tumors.

10 Q He wrote about paraffin oil as a cause of
11 cancer, correct?

12 A Again, Hueper wrote about studies of
13 things that were going on. Now with the case of
14 paraffin, paraffin is wax. I suppose there are
15 paraffin compounds that are liquids, as well, that is
16 true. In fact, some are gases.

17 Well, liquids anyway. But Hueper was
18 concerned about paraffins being used for milk carton
19 containers and found that it was not the paraffins he
20 was concerned about. It was the tar compounds that
21 were causing a darker coloration of some of these
22 paraffins that were contaminants of the paraffins.

1 So, the reason I am giving you these long
2 answers is because your questions, if answered yes or
3 no, would over-simplify the subject that he was
4 covering in these analyses of the literature.

5 Q He wrote about aromatic amines as a cause
6 of cancer, correct?

7 A Yes. Not only in other people's studies
8 but in his own experimental work, pioneering
9 experimental work. He published when he worked for
10 DuPont in the 1930s.

11 Q He wrote of isopropyl oil as a cause of
12 cancer, correct?

13 A I believe that is one of the agents that
14 he described publications in literature on. Yes.

15 Q And he wrote of arsonic as a cancer,
16 correct?

17 A Yes. There was an abundance of
18 literature on arsonic as a cause of cancer going back
19 to the 1930s.

20 Q And he wrote of chromates as a cause of
21 cancer?

22 A Yes.

1 Q And he wrote of nickel as a cause of
2 cancer?

3 A Yes.

4 Q And he wrote of ultraviolet radiation as
5 a cause of cancer?

6 A Yes. This is also well established, well
7 recognized.

8 Q And he wrote roentgentic radiation as a
9 cause of cancer?

10 A Yes. X-rays.

11 Q And he wrote of radioactive substances as
12 a cause of cancer?

13 A Yes.

14 Q And he wrote of engine exhaust as a cause
15 of cancer?

16 A I think he certainly talked about
17 whatever literature there was on the causes. Yes.

18 Q He wrote of aluminum as a cause of
19 cancer?

20 A I don't recall. But Hueper was really
21 encyclopedic in trying to review the medical
22 knowledge about exogenous causes of cancer, and he

1 would list what he found in terms of citations
2 through published literature.

3 Q And he wrote of magnesium as a cause of
4 cancer?

5 A I don't recall that.

6 Q He wrote of barium as a cause of cancer?

7 A I don't remember that, but it might be in
8 there. Hueper publish about 350 articles, chapters,
9 and books on occupational and environmental cancer.

10 Q He wrote of cadmium as a cause of cancer?

11 A Most likely.

12 Q He wrote of calcium as a cause of cancer?

13 A I don't remember that.

14 Q He wrote of Cobalt as a cause of cancer?

15 A I don't remember.

16 Q He wrote titanium as a cause of cancer?

17 A I don't remember titanium. Again this is
18 just from my recollection of articles I have seen,
19 not in my having studied all of his publications and
20 in anticipation of being quizzed about all of these.

21 Q He wrote of antimony, A-N-T-I-M-O-N-I --
22 M-O-N-Y, as a cause of cancer?

1 A I don't know.

2 Q Who wrote of beryllium as cause of
3 cancer?

4 A I don't know.

5 Q He wrote of selenium as a cause of
6 cancer?

7 A I don't know what he wrote about
8 selenium.

9 Q He wrote of manganese, M-A-N-G-A-N-E-S-E,
10 as a cause of cancer?

11 A I don't know.

12 Q He wrote of copper as a cause of cancer?

13 A I doubt he wrote about it as a cause of
14 cancer but he may have written about articles in
15 which the possible cancer-causing property of copper
16 were scientifically subjected to some studies.

17 Q He wrote of tin as a cause of cancer?

18 A The answer would be the same as for
19 copper. I don't know that tin was ever shown to be
20 carcinogenic. But he might have written about
21 negative experiments, studies on tin or copper.

22 Q He wrote of zinc as a cause of cancer?

1 A Same answer as for copper and tin. I
2 don't know.

3 Q He wrote of banabium, B-A-N-A-B-I-U-M, as
4 a cause of cancer?

5 A I don't know if he did or not. I mean to
6 say that he wrote about these things as a cause of
7 cancer is not quite fair. What he wrote about was
8 the medical and scientific literature on these
9 subjects. If the literature showed that they
10 appeared to be carcinogenic, his writings would
11 reflect that. If the literature showed they did not
12 appear to be carcinogenic, he would note that.

13 MR. MESHER: Objection, nonresponsive,
14 move to strike.

15 BY MR. MESHER:

16 Q He wrote of iron as a cause of cancer?

17 A Again, he may have written about any
18 studies that may have attempted to elucidate about
19 whether or not iron might have caused cancer.

20 Q And he wrote of chromium as well as
21 chromates as a cause of cancer? Do you recall that?

22 A I don't remember that separate from

1 chromate, but there may well have been treatment of
2 chromium metal in some study or another that Hueper
3 referred to. He was writing review articles about
4 the literature published -- primary literature
5 published by others.

6 Q He wrote that certain information should
7 be provided to certain industrial users in a quiet
8 way? Do you recall that?

9 A No. I don't recall that at all. Can you
10 show me what you're referring to?

11 Q Sure. Dr. Hueper and comments on
12 occupational cancer surveys in the United States
13 1952. On page 208. Here is the entire.

14 A Thanks.

15 Q Your welcomed.

16 MR. FROCKT: It actually is two separate
17 articles.

18 MR. MESHER: I'm sorry.

19 MR. FROCKT: Do you want him to look at
20 both of them?

21 MR. MESHER: Sure.

22 THE WITNESS: I think the context of that

1 is very important. Hueper is basically saying that
2 industrial hazards should be dealt with in an
3 effective way and not necessarily in a way that's
4 needlessly public or humiliating to companies that
5 handle these materials.

6 He says -- talks about, well, it's only
7 fair to industrial users and the general public that
8 a reasonable amount of information about the
9 existence and types of occupational carcinogens is
10 made available to them so that such hazards cannot be
11 spread or sustained any longer by sheer ignorance of
12 such matters.

13 This does not imply that such information
14 has to make headlines in newspapers but in a quiet
15 way preferably through trade circles, pertinent data
16 on recognized, suspected, and potential carcinogenic
17 agents should be distributed so that the necessary
18 technical and commercial adjustment processes can be
19 initiated and carried out in an orderly fashion
20 without causing any serious disruptions in the
21 industrial, economic, and social pattern.

22 So, Hueper is basically calling on the

1 people involved to handle this in a dignified,
2 proper, thorough, and professional manner, and not
3 necessarily with resort to publicity or headlines.

4 BY MR. MESHER:

5 Q Sure.

6 A I think that the context is important in
7 asking and answering questions about that.

8 Q Dr. Hueper published an article about
9 experimental studies in metal, cancer, or genesis.
10 Do you recall that asbestos in lanolin was injected
11 in some rats?

12 A I don't remember that specifically, but
13 there may have been. I think there were some
14 negative experimental studies that he referred to on
15 asbestos. I think there's at least one referred to
16 in my book.

17 Q And Dr. Hueper concluded an article in
18 1954 rats injected into the narrow cavity of the
19 femur, pleura cavity, or paranasal sinuses with
20 powdered arsonic beryllium or asbestos suspended in
21 lanolin did not develop any significant number of
22 cancers either at the site of deposition or in any

1 remote organ causally related to the chemicals
2 introduced. Do you recall that?

3 A I don't recall the specific quote. I do
4 have a reference, I think, in my book to studies he
5 did on very small numbers of animals in which he did
6 not find any positive results for asbestos.

7 Q Dr. Hueper also believed that for -- in
8 order to have a lung cancer that he believed could be
9 related to asbestos that he had to have asbestosis
10 present. Is that correct?

11 A Well, he used the term asbestosis cancer
12 of the lung. But people attending some of his
13 presentations understood from them that he was
14 talking about the microscopic scarring that could be
15 caused by as little as one fiber as the initiating
16 cause of such cancer.

17 Q Dr. Hueper wrote that there was support
18 for a causal relation between asbestosis and cancer
19 of the lung, correct?

20 A He wrote that asbestos caused cancer of
21 the lung and that that was based on studies of
22 workers with asbestosis who also got lung cancer.

1 Q Apparent dependence of cancerous changes
2 in the lungs of asbestos workers on the presence of
3 asbestosis and in view of the possibility that the
4 proteins of the lung tissue may specifically interact
5 with three groups of filamentary asbestos molecules.
6 Do you recall Dr. Hueper writing about that?

7 A I don't recall that sentence. No.

8 Q It says you have testified as an expert
9 in over 100 cases throughout the nation on issues
10 related to asbestos state of the art and the
11 historical development of asbestos knowledge. Have
12 you ever testified on behalf of a defendant in an
13 asbestos-related case?

14 A Just once.

15 Q Who was this?

16 A United States of America.

17 Q And when was that?

18 A 1987.

19 Q And who was the plaintiff in that?

20 A Johns Manville.

21 Q And what was Johns Manville suing the
22 government over?

1 A Johns Manville was alleging that the
2 contracts it had with the government during World War
3 II made the government contributorily responsible for
4 the asbestos-related disease sustained by workers
5 from the use of asbestos in shipyards during World
6 War II.

7 Q The design specification versus
8 performance specifications?

9 A There was certainly testimony on military
10 specifications in the case, but the case as far as my
11 testimony went came down to did the government or the
12 Johns Manville have superior knowledge that it wasn't
13 sharing with the other party about the hazards of
14 asbestos.

15 And, you know, the argument from the
16 standpoint of Johns Manville has also been
17 characterized as the devil made me do it. It was
18 because the government required these materials Johns
19 Manville argued you was the government's fault.

20 Q Who is Kenneth Lynch?

21 A He was a medical doctor in Carolinas who
22 published the first article linking cancer and

1 asbestos in 1935 in the medical literature in the
2 United States.

3 Q Was he pretty well known and respected?

4 A I don't know. He was -- I think he
5 became the president of some medical college in South
6 Carolina in the 1950s or so. He continued to publish
7 on asbestos an cancer in 1939, 1948, and 1955.

8 Q Are you aware that Dr. Lynch reported in
9 1960 that he had no knowledge of any data on pleura
10 mesothelioma associated with asbestos dust exposure?

11 A I have not seen that. Can you show me
12 what you're talking about?

13 Q I will before we get through today. Yes.
14 Let's turn to page five of your declaration, please.
15 Lines seven and eight. The journal of the American
16 Medical Association was believed to have been read by
17 80 percent of the American physicians in those years
18 medical historians agree. Who wrote? What's the
19 basis of that statement?

20 A The references are in chapter one of my
21 book. And in the current edition, there are
22 references 57 and 58 of the chapter one.

1 Q Okay. I have that. That's fine. I note
2 you have your book. Could you turn to the
3 acknowledgments in that, please?

4 A Yes.

5 Q The author is grateful for the assistance
6 of a large number of people in the preparation of
7 this book, and I see Dr. Hueper, correct?

8 A Right.

9 Q When did Dr. Hueper provide you with the
10 papers that he provided you?

11 A Well, I've told you what he provided me
12 with.

13 Q I am sorry. I just meant the year.

14 A We had many discussions, and they were
15 between 1976 and 12 days before he died in December
16 1978.

17 Q I also note in here that Conard Metcalf
18 assisted in the compilation of the material and
19 review of your book. Is that correct?

20 A Well, he provided material for the book.
21 Yes.

22 Q So, it says attorneys in asbestos

1 litigation who gave generously of their time to
2 assist in the compilation of material and review.
3 It's presentation included Conard Metcalf. Is that
4 right?

5 A I changed the language slightly in
6 subsequent editions to clarify. But in the first
7 edition you are reading from, I lumped it kind of
8 together and indicated that there were a bunch of
9 lawyers who had done several things.

10 Very few of the lawyers actually reviewed
11 material prior to its publication. I don't think
12 Metcalf is one of them, but he provided material
13 prior to the publication of the book because, of
14 course, information obtained in legal discovery is
15 not otherwise available to scholars such as myself.

16 Q I did read that correctly, didn't it?

17 A I think so.

18 Q Now, Merrewether and Price published an
19 article in 1930?

20 A They did.

21 Q And in that article not all the persons
22 who were exposed to asbestos got any type disease,

1 correct?

2 A That's correct.

3 Q Have you found any literature that
4 indicates that persons who are exposed to asbestos
5 are certain to contract disease?

6 A I don't think there's -- I can't think of
7 a paper that says that although I think there is at
8 least one I have seen where everybody in the study
9 had asbestos disease. But that doesn't mean that it
10 always happens or that the author of the study made
11 any comments about whether or not it always happens.

12 Q Yes, sir. My question to you, sir, is
13 have you seen any study that indicates that all
14 workers who were exposed to asbestos are certain to
15 get disease?

16 A No. I think it's well understood that
17 some people do manage to walk through the valley in
18 the shadow of death and not get struck down by
19 something like this.

20 MR. MESHER: Objection, nonresponsive. I
21 move to strike.

22 BY MR. MESHER:

1 Q Sir, my question is are you aware of any
2 study that shows that all workers who are
3 occupationally exposed to asbestos are certain to get
4 the disease?

5 A No.

6 MR. FROCKT: Objection. Asked and
7 answered.

8 BY MR. MESHER:

9 Q Thank you. Sir, are you familiar with a
10 journal Lancet, that publication?

11 A Yes.

12 Q Is that the same as The Lancet published
13 over in England?

14 A I don't think so.

15 Q Where was the journal Lancet published?

16 A I think it was published in the United
17 States, but I don't off the top of my head recall the
18 mast head page of the journal would say about that.

19 Q Was it a widely recognized publication,
20 the journal Lancet?

21 A I don't really know. I don't suppose I'm
22 an authority on medical journals as to how widely

1 they were. Obviously the Lancet was a widely
2 recognized journal, but the journal Lancet is not in
3 the same class as the Lancet in terms of its global
4 circulation and reputation. I don't really know how
5 to answer the question.

6 Q Would you be surprised to learn that Dr.
7 Eagleman thought that virtually no one knew of the
8 journal Lancet outside of maybe the people who were
9 publishing it?

10 A I don't really -- I don't really know
11 what to do with a question like that. I mean
12 Eagleman has whatever opinions that he has. I can't
13 think of another article I have seen except was cited
14 in that journal, but that does not mean a whole lot.

15 Q When did you first see the journal Lancet
16 publications?

17 A Well, the article by Eisenstadt really is
18 what I recall the journal for. I don't recall having
19 seen other articles published in it, but I have seen
20 the work of Eisenstadt going way back. It was
21 certainly one of the things that was cited in the
22 literature on asbestos and disease which I have been

1 familiar with for many years.

2 Q Who cited the Eisenstadt Wilson '60
3 article?

4 A I don't remember now.

5 Q Okay.

6 A There may have been lots of articles that
7 cite it.

8 Q There may not have been also, correct?

9 A Again, it is just an impression. I don't
10 really have any kind of quantitative annotated
11 answers to give you for a question like this off the
12 top of my head, but I think I have seen reference to
13 it in a number of places.

14 Q Longer than, say, ten years ago?

15 A Well, you can open up the volume in front
16 of you that I wrote 20 years ago and see if it's in
17 there. Chapter five, table two.

18 Q It is in here. At page 271.

19 (Off the record.)

20 BY MR. MESHER:

21 Q In the Wilson and Eisenstadt article,
22 there are certain references listed in that article.

1 MR. FROCKT: Can he look at it?

2 MR. MESHER: Yes. I can show you my
3 copy.

4 MR. FROCKT: We also have a copy.

5 BY MR. MESHER:

6 Q I apologize. It's not the best copy that
7 I have. Are you looking at table two or a different?

8 A I am looking at table five, chapter two
9 of my book. It is probably very much unchanged from
10 the first edition which you have.

11 Q Okay. Now, sir, the articles 11 through
12 15 that are listed in the references, those are
13 foreign studies, aren't they?

14 A Well, 11, 12, and 13 are.

15 Q Okay. What is 14?

16 A Fourteen is published by the medical
17 director Johns Manville. Fifteen is published by a
18 physician in Pennsylvania.

19 Q Okay. Thank you. What significance do
20 you place on the Eisenstadt and Wilson article in the
21 state of the art?

22 A Well, I think that this really is an

1 article that recognizes that as asbestos causes
2 mesothelioma and cites a number of references to that
3 effect. By no means all of the references that have
4 been published along those lines, but some of them.
5 The article shows a familiarity with the literature
6 on mesothelioma and asbestos which is pretty good for
7 its day I would say. I think this is 1960.

8 Q Do you know who actually wrote the
9 article?

10 A Well, I don't know the extent of how the
11 labor of writing the articles is divided between the
12 two authors. No, I don't.

13 Q Okay. Now, Vogner or Wagner,
14 W-A-G-N-E-R? How do you pronounce that?

15 A Vogner.

16 Q Vogner came out with an article on
17 mesothelioma in 1960 also. Is that correct?

18 A He did.

19 Q And he believed that crocidolite was the
20 cause of the mesothelioma. Is that correct?

21 A He believed that he had in his paper
22 includes strong evidence that crocidolite caused

1 mesothelioma. I don't think that he indicated that
2 no other type of asbestos could cause mesothelioma.

3 Q In subsequent papers, Dr. Vogner believed
4 that the only cause of mesothelioma based on his
5 research was crocidolite? Is that correct?

6 A I would like you to show me which papers
7 you are referring to. There are certainly papers he
8 published in which he tended to indicate that -- But
9 these were not published until in the late '80s and
10 '90s, I think, that where he tended to indicate that
11 most or --

12 Again, I am trying to think of how to
13 characterize his publications. I guess all I can say
14 is that the publication is the papers that he issued
15 after he became a consultant to Owens Illinois were
16 consistent with the positions taken by Owens Illinois
17 in asbestos litigation.

18 Q Owens Illinois manufactured a product
19 called Kalo. Is that right?

20 A Right.

21 Q And Owens Illinois to your knowledge
22 didn't place warning labels on their packages and

1 asbestos-containing products until what? Almost
2 1972?

3 A Well, Owens Illinois got out of the
4 business in 1958. But through the years they made
5 the product, they did not put warning labels on it.
6 That's correct.

7 Q And Owens-Corning Fiberglas took over
8 that product line at some point. There is a dispute
9 whether or not they took over in '53 or '58. But at
10 some point, am I correct, sir, that Owens-Corning
11 Fiberglas continued to manufacture and market a Kalo
12 product?

13 A Yes. They did that.

14 Q And that Kalo product was asbestos
15 containing? Is that correct?

16 A At first it was.

17 Q Through at least the time that Mr.
18 Jameson was employed at the refinery, correct?

19 A So I understand. Yes.

20 Q And Owens-Corning Fiberglas never placed
21 any warning labels on the boxes of Kalo, correct,
22 through at least through 1966, correct?

1 A So I understand. Yes.

2 Q Is it your opinion that manufacturers of
3 the asbestos containing, pipe covering, block cement,
4 Kalo should have placed warning labels on the
5 packages by at least the end of 1966?

6 A Well, before that time. Yes.

7 Q And the purpose of that warning label
8 would be to warn the purchaser or ultimate user of
9 that product of known hazards that were involved with
10 the use of such products, correct?

11 A Yes. Known and suspected hazards and
12 means to reduce or eliminate them.

13 Q And that Owens-Corning Fiberglas and
14 other manufacturers of asbestos-containing, thermal
15 insulation products should have warned prior to 1958,
16 correct?

17 A I believe they should have based on what
18 was in the medical and scientific literature about
19 the hazards of asbestos that this would have been an
20 additional way of assuring that workers who were
21 exposed to hazardous conditions with asbestos
22 products in places like oil refineries would be aware

1 of these hazards whether or not the owners of the
2 refineries chose to take steps to protect them.

3 MR. MESHER: Objection, nonresponsive,
4 move to strike.

5 BY MR. MESHER:

6 Q Manufacturers of asbestos-containing,
7 thermal insulation products such as the Kalo product
8 that was manufactured by Owens Illinois and
9 Owens-Corning Fiberglass should have placed warning
10 labels on those packages based on your knowledge of
11 the medical literature prior to 1958, correct?

12 A Yes. That's my belief.

13 Q So that people such as Mr. Jameson who
14 testified in his deposition that he would take the
15 boxes of asbestos-containing, insulation products and
16 load them on a truck and place it on -- take it to
17 the area where he stated that he was working would
18 have had the opportunity to read what was on those
19 boxes, correct?

20 A Yes.

21 Q Now, let's talk a minute about Alan
22 Dooley, please. You or Mr. Frockt brought today the

1 Fulton Dooley. At least parts two and three. Is
2 that correct?

3 A Yes.

4 Q Where was that published?

5 A It was published as a government report
6 by the State of Pennsylvania.

7 Q Okay. And in what? Was it published in
8 any literature, in any, like, the Lancet or anything
9 like that?

10 A It was not published in a medical
11 journal. It was published separately as a government
12 report.

13 Q And is that Fulton study listed in your
14 book?

15 A Oh, yes. Of course.

16 Q In table.

17 A It's a very important study.

18 Q In table two?

19 A No, no, no. That's in the fourth
20 chapter. I have even reproduced the table from the
21 study. In table one of chapter four. And in the
22 current edition of my book, I discuss on pages 287

1 through 289.

2 Q And you state at least in your
3 declaration on page eight and nine at the bottom
4 starting on line 22 this guideline, and that's
5 referring to the Dressen '38 publication. This
6 guideline was recommended as a tentative occupational
7 exposure limit though it was noted that the
8 Pennsylvania study had found cases of asbestosis at
9 that level of exposure. Is that correct?

10 A That's correct.

11 Q And the Pennsylvania study that you are
12 referring to that found cases of asbestosis at the
13 five million particles per cubic foot of air was the
14 Fulton Dooley?

15 A Actually they found at less than five,
16 but the public health service rounded it off and said
17 and this is quoted a few pages later in my book. And
18 in their report of a similar study carried on in
19 Pennsylvania asbestos textile factories Fulton,
20 Dooley, Matthews, and Houtz, H-O-U-T-Z, found that
21 eight percent workers exposed to an average dust
22 concentration of five million particles per cubic

1 foot had asbestosis, and goes on from there.

2 Q How many of those were exposed at the
3 level at or below five million particles of per cubic
4 foot of air?

5 A All we know is the eight percent figure
6 applies to the group of workers whose actually
7 exposure is indicated as 4.64 million particles per
8 cubic foot as shown in the table in my book which
9 comes a few pages earlier and is reproduced directly
10 from the Pennsylvania study.

11 Q When Dressen published in 1938 the --
12 published his work when Dressen was working with the
13 Public Health Service, he cites the Fulton article.
14 Is that right?

15 A Yes.

16 Q But Dressen concluded that the threshold
17 limit value guideline should be five million
18 particles per cubic foot of air? Is that correct?

19 A They did. They called it a tentative
20 threshold, and, as I note, they do not attempt to
21 resolve the conflict between their recommendation and
22 the findings of the Pennsylvania study which they

1 referenced.

2 Q Sure. There is no doubt that Dressen
3 would have reviewed the Fulton Dooley article prior
4 to the time that Dressen published his -- his
5 bulletin, correct?

6 A I think that is fair to assume
7 considering they cited the study. Of course, it's
8 always possible people cite things they have not read
9 through carefully. But in this case, I think it's
10 reasonable to assume that he not only cited the study
11 but he devoted some efforts to reading through what
12 it said.

13 Q Regardless of what the Fulton articles
14 talk about, Dressen reported for the Public Health
15 Service the guideline of a tentative occupational
16 exposure limit of five million particles per cubic
17 foot of air, right?

18 A Right.

19 Q Was that on a time-weighted average?

20 A Dressen didn't really say, I think,
21 anything about time-weighted average in his report
22 although it is probably reasonable to infer that is

1 what he was meaning.

2 Q Let's talk a little bit about threshold
3 limit values, if you we could.

4 After Dressen came out in '48 Sayers and
5 Dressen published an article -- I am sorry. After
6 Dressen came out in '38 with the Public Health
7 Service bulletin, Sayers and Dressen published an
8 article in '39. Is that correct?

9 A Yes. They attempted to summarize their
10 findings in a much shorter article in the American
11 Journal of Public Health.

12 Q And that article one of the purposes was
13 to find out what concentrations of asbestos dust can
14 be tolerated without injury. Do you recall that?

15 A That sounds more like the listing of
16 objectives from the 1938 study. But again, I haven't
17 got the 1939 report memorized.

18 Q I am sorry.

19 A That is the '39 record.

20 Q Yes. The 1939 Sayers and Dressen
21 objective number three. To find out what
22 concentrations of asbestos dust can be tolerated

1 without injury. That was one of the objectives of
2 the '39 Sayers and Dressen, correct?

3 A Yes. In the sense that somebody might be
4 publishing a study on research into a cure for AIDS
5 and saying the objective of our research is to find a
6 cure for AIDS and then describe some microscopic,
7 molecular phenomenon that might some day some how be
8 contributory to a cure for AIDS.

9 Q And Sayers and Dressen published in '39
10 it appears that if asbestos dust concentrations in
11 the air breathed are kept below five million
12 particles per cubic foot new cases of asbestosis will
13 not appear. That is what they published, correct?

14 A I think so.

15 Q Okay. So, we've got Sayers and Dressen
16 were talking about the same thing that Dr. Dressen
17 was talking about the year earlier, correct?

18 A Well, if you read the original report
19 that Dressen published in 1938, he describes it at
20 greater length and talks about it as a tentative
21 threshold value to be followed until more complete
22 information becomes available.

1 Q After Sayers and Dressen, Fleischer
2 Drinker came out with their study in '46? Is that
3 right?

4 A There was also a study Fleischer and
5 coworkers published in 1946. That's correct.

6 Q Flesher Viles, V-I-L-E-S, Gad, G-A-D, and
7 Drinker? Is that correct?

8 A Correct. Those were their names.

9 Q And that was published in the Journal of
10 Industrial Hygiene and Toxicology? Is that correct?

11 A Yes.

12 Q And was that a widely distributed
13 journal?

14 A It was available in medical libraries in
15 major cities, in quite a few probably major cities
16 around the United States. It was not a journal that
17 would have been read by most doctors like the journal
18 of The American Medical Association, but it was a
19 journal that was -- would have been well known in the
20 field of industrial hygiene and medicine having
21 started in 1919.

22 By 1946, I would expect that people in

1 the field of industrial hygiene and medicine would
2 have, most of them would have known about this.

3 Q You would have expected, for example,
4 Alan Dooley would have known about the Fleischer
5 Drinker article? Is that correct?

6 A Well, he would have known about the
7 journal it appeared in. How much attention he paid
8 to the article is I don't know.

9 Q That journal was known to industrial
10 hygienists at the time? Is that correct?

11 A Yes.

12 Q And Fleischer Drinker concluded that --
13 conclusion number four. Since each of the three
14 cases of asbestosis had worked at pipe covering in
15 shipyards -- had worked at asbestos pipe covering in
16 shipyards for more than 20 years, it may be concluded
17 that such pipe covering is not a dangerous
18 occupation. That is a what they wrote, correct?

19 A That is part of what they wrote, yes.

20 Q Now, the Fleischer Drinker article at the
21 same time in 1946 the ACGIH published their
22 guidelines on threshold limit values for asbestos.

1 Is that correct?

2 A In 1946, the American Conference of
3 Governmental Industrial Hygienists published the
4 first of their annual lists of threshold limit values
5 which they then called maximum allowable
6 concentrations, and Phillip Drinker was the author of
7 this Fleischer Drinker Report, as you call it, was
8 one of the members of the TLV committee.

9 Q In 1942, the NCGIH adopted guidelines
10 for asbestos exposure, correct?

11 A Well, this is the early documentation of
12 the American Conference of Governmental Industrial
13 Hygienist which may have called itself a national
14 conference in 1942. As I recall had a subcommittee
15 in 1942 that simply compiled lists of occupational
16 exposure limits for different toxic substances. But
17 I don't recall that they made any recommendations
18 until 1946.

19 Q Okay. And then the guideline or what
20 I've termed is it a guideline or recommendation?

21 A You could call it either of those.

22 Q Okay. The threshold limit value of five

1 million particles per cubic foot of air remained in
2 effect by the ACGIH from 1946 until at least 1968,
3 correct?

4 A Yes. I mean in effect it's words that
5 may warrant some definition in this case.

6 They were simply recommendations that
7 were put out by a professional association which had
8 no legal authority or governmental authority on its
9 own.

10 Q Welsch Heely adopted five million
11 particles per cubic foot of air standard in 1952. Is
12 that correct?

13 A I don't know if it was in '52 or later.
14 I recall seeing regulations pursuant to the Welsch
15 Heely Act published in December 1960 that did adopt a
16 list of TLVs, threshold limit values, for that period
17 and had some additional introductory text stating how
18 this ought to be applied in industries where -- well
19 in companies that were subject to do Welsch Heely Act
20 for government contract.

21 Q You recall in 1960 that was the U.S.
22 Department of Labor, the U.S. Bureau of Labor

1 Standards Safety and Health regulations for ship
2 repair? That was 1960?

3 A That sounds right. It was certainly the
4 Department of Labor. I don't recall the exact name
5 of the sub-bureaucracy.

6 Q Do you recall prior to that in about 1960
7 was the Welsch Heely standard?

8 A We -- There was a Welsch Heely Act back
9 in the 1930s, but I don't know that they had any kind
10 of formal adoption of the threshold limit values
11 prior to 1960. They may have, but I don't know about
12 that for sure.

13 Q The ACGIH is an organization devoted to
14 the advancement of industrial safety and health. Is
15 that your understanding?

16 A Well, it's a professional association,
17 and it has the usual flowery language that
18 professional associations lists as their charters and
19 goals.

20 Q It was created in 1941 to bring order and
21 uniformity to various and sometimes conflicting state
22 and local industrial air standards. Is that your

1 understanding?

2 A Not necessarily. I mean it was basically
3 a new field, industrial hygiene. The professional
4 associations of industrial hygiene were created in
5 1938 and 1939. And at this point, they were like the
6 comedian. Still trying to get respect.

7 They were probably also interested in
8 developing some more standardized approaches in
9 refining the standards of their profession. But they
10 were just beginning to find their way back in 1941 as
11 a profession.

12 Q And in 1948, there was a TLV committee as
13 part of the ACGIH? Is that correct?

14 A In 1948?

15 Q Yes, sir.

16 A There was.

17 Q And that committed recommended and the
18 ACGIH adopted the five million particle per cubic
19 foot threshold per limit value for asbestos, correct?

20 A That's correct.

21 Q That is on a time-weighted average?

22 A No. They didn't say. They never defined

1 the TLVs in the 1940s. It wasn't until 1953 that
2 they published a list of TLVs and said by the way
3 these are time-weighted average daily exposure
4 limits.

5 Previously they had confronted the
6 question in 1946 when they first introduced such a
7 list and listed basically three different types of
8 definitions for these exposure limits without
9 explaining which limits were of which type.

10 Q And THE TLV standard that the ACGIH
11 adopted in 1948 was based upon the 1938 Dressen
12 study, the 1946 Fleischer Drinker study, as well as
13 other available information. Is that correct?

14 A We don't know what it was based on. The
15 TLV basically was -- First, the asbestos limit was
16 first published in the list in 1946, as I have said.
17 After that, I don't think any attention was paid to
18 it for a number of years. It was republished as part
19 of a list, a preexisting list to which new substances
20 were being slowly added year by year by the
21 committee.

22 Q The TLV committee annually reviewed the

1 asbestos threshold limit from at least 1951 until
2 1977. Is that correct?

3 A Well, they had a preface statement to the
4 effect they annually reviewed all the limits on the
5 list. But these things are easier said than done,
6 and there is no evidence that I have been able to
7 find that they actually did carry out that function.

8 This was a volunteer committee. And in
9 1948, for example, they didn't have a single medical
10 doctor on the committee. Neither did they in 1946 or
11 1947, the years that Phillip Drinker was on that
12 committee, have a medical doctor.

13 So -- And this is reflected in the TLV
14 documentation which didn't start getting published
15 until 1962. But they really didn't read the medical
16 literature so much.

17 These were mainly industrial hygienists
18 and toxicologists. And one of the things that they
19 have been criticized for was the -- their failure to
20 fully avail themselves of stuff that was in print in
21 the medical literature.

22 MR. MESHER: Objection, nonresponsive. I

1 move to strike.

2 BY MR. MESHER:

3 Q Do you have personal knowledge whether
4 the TLV committee annually reviewed the asbestos
5 threshold limit value from 1951 to 1977?

6 A All I can say is I have investigated this
7 as thoroughly as anyone could, and I have not found
8 any evidence that they actually did such a thing.

9 Q Based on the TLV committee, the opinion
10 of the TLV committee was that the five million
11 particle per cubic foot threshold limit value
12 provided adequate protection until 1968 or '69 when
13 there was a downward revision proposed, correct?

14 A Well, they basically recommended this
15 exposure limit and declined to change it until 1968
16 or '69 at which time Andrew Selikoff publications and
17 other stuff they were moved to reconsider the limits
18 that they had previously been republishing.

19 And as I indicated based on their
20 documentation of threshold limits first published in
21 1962, we can see that the exposure limits were based
22 only on the -- mainly on the 1938 Dressen Report of

1 the Public Health Service and that cancer wasn't
2 considered in the development of the threshold limit
3 values in the 1960s.

4 Q The ACGIH would have also based the TLV
5 on the '46 Fleischer Drinker study, wouldn't it,
6 since Drinker was on the committee?

7 A Not necessarily. The '46 Fleischer
8 Drinker study was not referenced in the documentation
9 of threshold limit values I don't think.

10 So, we don't have any real basis for
11 saying that it played a role in that unless it was
12 referenced, and I don't believe it was.

13 Q You don't think that Phillip Drinker
14 would have told the committee his experience in 1946
15 or do you?

16 A I don't know what he told the committee.
17 In 1946, they published a list of exposure limits for
18 a hundred and forty-four substances. How much time
19 they spent discussing each one is a matter of
20 conjecture.

21 Q The five million particle per cubic foot
22 threshold limit value meant five million particles of

1 asbestos dust per cubic foot regardless of whether
2 such dust was composed of particles, or fibers, or
3 both, correct?

4 A I am not sure I understand your question.
5 Fleischer clearly indicated in his article in 1946
6 that this 1938 public health study had been based on
7 total dust counts using midget impinger.

8 Q The threshold limit value of five million
9 cubic particles per cubic foot of air meant five
10 million particles of asbestos dust. Is that your
11 understanding?

12 A No. Fleischer himself made it clear that
13 that was not the case in his 1946 article. He isn't
14 talking about the work on this committee with the
15 American Conference of Governmental Industrial
16 Hygienists, but he is referring to the Public Health
17 Service study that had established in some sense a
18 recommended guideline. And he makes reference to
19 that as a total dust count, not as a count of just
20 asbestos particles.

21 Q There was no separate asbestos threshold
22 limit value for cancer since it was believed by the

1 TLV committee at the time that cancer was considered
2 in 1964 that cancer did not occur without the
3 presence of asbestosis and, therefore, the
4 established threshold limit value adequately protects
5 against cancer. Is that correct?

6 A I think that is highly conjectural. The
7 TLV committee published documentation on threshold
8 limits issued in 1966 contains not a single reference
9 after -- published after 1955.

10 The subject of cancer is not discussed in
11 the documentation. So, you don't have any way of
12 knowing the extent to which this committee gave any
13 consideration to the literature which was by then
14 rather abundant on the subject of cancer as an
15 asbestos disease.

16 Q Stokinger, S-T-O-K-I-N-G-E-R, wrote about
17 threshold limit values in 1955. Is that correct?

18 A Yes.

19 Q And Stokinger wrote that limiting values
20 assigned to each substance on the list which would
21 include asbestos represent the maximal atmospheric
22 concentration to which workers may be exposed

1 repeatedly day after day without injury to health.

2 Do you recall that?

3 A That sounds like something Stokinger
4 would have written. He was interested in making
5 these kinds of grand statements about the competence
6 of the TLV committee, the thoroughness of their
7 diligence in coming up with TLVs, and their
8 omniscience in writing lists of exposure limits that
9 would be protective of workers based on sometimes
10 very scant scientific literature.

11 Q Stokinger was on the ACGIH TLV committee.
12 Is that right?

13 A Yes.

14 Q From what was it? Like '51 into the
15 '70s?

16 A Into the late '70s. Yes. I think '77 or
17 so.

18 Q When you were doing your thesis, did you
19 ever speak to Mr. Stokinger?

20 A I eventually did catch up with him. I
21 interviewed him when I was investigating the history
22 of the threshold limit values, and corporate

1 influence on the threshold of limit values. And went
2 out to lunch with him when I was in Cincinnati going
3 through hold Stokinger files.

4 I had about two hours of questions for
5 Dr. Stokinger along the lines of things like I
6 noticed, for example, that the standard TLV for
7 tetraethyllead was determined at a meeting of the
8 threshold limits committee in 1968 April 2nd and 3rd.

9 And the critical reference in raising the
10 allowable exposure limit for this deadly substance
11 was phone call, not phone call. It was called
12 personal communication to the chairman from A. Linch.

13 And it was not disclosed in the TLV
14 documentation that Adrienne Linch was an industrial
15 hygienist with the DuPont Company nor was it
16 disclosed what sort of communication it was.

17 But Stokinger in his interview with me
18 more or less admitted that it was probably a
19 telephone call or because the mail didn't go there
20 back in 1968.

21 Q What do you recall discussing with Mr.
22 Stokinger about asbestos?

1 A I don't recall what, if anything, he said
2 about asbestos. There are hundreds of chemicals on
3 the list, TLVs, and I wasn't that single-minded about
4 asking about asbestos. I believe I asked him
5 something, but I don't recall now what it would have
6 been. This is probably about 15 -- more than 15
7 years ago.

8 Q Sure. National Safety Council. When was
9 the first National Safety Council that was entirely
10 devoted to the subject of asbestos?

11 A I don't know. There were plenty of
12 articles that talked about asbestos going back to
13 1929, I think. But I don't recall specifically
14 articles solely devoted to asbestos.

15 MR. MESHER: Objection, nonresponsive,
16 move to strike.

17 BY MR. MESHER:

18 Q Sir, my question to you was when was the
19 first National Safety Council article that was
20 entirely devoted to asbestos? Do you recall?

21 MR. FROCKT: Objection. Asked and
22 answered.

1 THE WITNESS: I don't recall any article
2 from the National Safety Council that was, as you put
3 it, entirely devoted to asbestos.

4 BY MR. MESHER:

5 Q What leads you to conclude in your
6 declaration that the transactions from National
7 Safety Council meetings were automatically mailed to
8 the industrial members?

9 A Because that's what it said on the
10 opening pages of the volumes of these annual
11 conference proceedings.

12 Q Do you have any of those with you today?

13 A No.

14 Q What record do you reference in paragraph
15 22 of your declaration that indicates that Texas
16 Company officials were members, participants, and
17 even newsletters for the Council going back as far as
18 the 1930s?

19 What specific documents do you have
20 indicating when Texaco was first a member?

21 A These would probably be from the National
22 Safety congresses in which they talk about the

1 different sections of the National Safety Council
2 including the petroleum section. Usually these
3 documents list large numbers of officers of the
4 section.

5 And one sees their corporate affiliations
6 after their names. That would be the likely basis of
7 that.

8 Q When did you last review such National
9 Safety Council records to indicate when Texaco was
10 first a member?

11 A Well, I don't know exactly when they were
12 first a member, but the documents I have seen
13 indicate that they were members, you know, back in
14 the 1930s.

15 Q What specific document is that in? Do
16 you have that with you today?

17 A No, I don't.

18 Q Okay. Then Bonsib. You make reference
19 to Bonsib in 1937. And you don't have any personal
20 knowledge whether my client received a copy of that
21 document, correct?

22 A That's correct.

1 Q Now, you say that in your opinion the
2 Bonsib Report establishes the state of the art
3 concerning a variety of dust hazards and refining
4 operations generally including for asbestos dust? Is
5 that correct?

6 A Yes.

7 Q Have you surveyed any other refineries or
8 any refineries at all for or any owners of refineries
9 to determine whether or not anyone other than
10 Standard Oil received a copy of that 1937 report?

11 A I haven't been able to establish. At
12 least nothing I have seen establishes clearly what
13 the circulation of that report would have been
14 outside of the company that employed Mr. Bonsib. The
15 reason for my comment is that Bonsib is for the most
16 part writing about stuff that was based on what was
17 in the open published scientific literature and not
18 based on any kind of specially contracted research or
19 studies done by his group at Standard Oil.

20 Q One of the references in Bonsib in that
21 '37 Bonsib, was Mr. Sayers or Dr. Sayers. Do you
22 recall that?

1 A No, I don't. I mean, Dr. Sayers worked
2 for the Bureau of Mines or the Public Health Service
3 for many years.

4 MR. FROCKT: Can you give us a reference?

5 MR. MESHER: Sure.

6 BY MR. MESHER:

7 Q It's the last page of the '37 Bonsib. We
8 also appreciate the advice and assistance rendered by
9 Dr. R.R. Sayers, Senior Surgeon, who is Public Health
10 Service. Is that right?

11 A That's what it says. Yes.

12 Q Is that the same Sayers that wrote at
13 least the article with Sayers and Dressen that we
14 were talking about earlier?

15 A That's right. Of course, that was years
16 after this report by Bonsib.

17 Q Do you know whether or not Standard Oil
18 even followed what Mr. Bonsib wrote in 1937?

19 A I don't know the extent to which Bonsib's
20 I suppose you could call them recommendations in this
21 report were followed. I don't know the extent to
22 which they were followed within the company. It is

1 all too common that knowledgeable people in the field
2 of industrial hygiene are employed by big companies
3 and make recommendations that don't tend to be very
4 widely followed.

5 Q Or widely disseminated also? Is that
6 correct?

7 A That is also something that happens
8 sometimes. Yes.

9 Q 1949, Alan Dooley. Mr. Dooley joined
10 Texaco in what year?

11 A I think 1946 or '47.

12 Q So within two years of Alan Dooley
13 joining Texaco, he is doing a survey of Texaco's Port
14 Arthur works and issues a report, correct?

15 A Yes.

16 Q And Mr. Dooley was the same person who
17 was involved with the Fulton Dooley article, correct?

18 A Right.

19 Q And Mr. Dooley acknowledged that there is
20 a maximum allowable concentration for exposure to
21 asbestos, correct?

22 A He makes reference to that.

1 Q And that was five million particles per
2 cubic foot of air?

3 A I assume so. Yes.

4 Q I note that you make a quotation or you
5 quote a portion of Mr. Dooley on page ten and the top
6 of page 11. Is that correct?

7 A Yes.

8 Q And maybe you could just turn to Mr.
9 Dooley's survey.

10 A Yes.

11 Q Do you have that in front of you?

12 A I do.

13 Q I note that you quoted a sentence from
14 this report. Is that correct?

15 A Yes.

16 Q I note that you didn't quote the next
17 sentence also.

18 A That is correct. I did not. In the
19 report.

20 Q And that next sentence, what does that
21 say?

22 A It says the maximum allowable

1 concentration of asbestos dust in the breathing zone
2 of workers has been set at five million particles per
3 cubic foot of air.

4 Q Was it believed that if there was an
5 exposure -- exposures below the maximum allowable
6 concentration that people would suffer injury?

7 A I think Dooley had reason to believe
8 that. He had published on it in 1935.

9 Q That was Dooley's 4.64?

10 A Right.

11 Q Dooley also says that the maximum
12 allowable concentration has been set at five million
13 particles per cubic foot of air. Was that based on a
14 time-weighted average?

15 A I don't think it's possible to say that
16 it was or that it wasn't. At that time, I don't
17 think you could reference an answer to that either
18 way.

19 Q I guess we would have to know what Alan
20 Dooley was thinking to figure that one out, wouldn't
21 we?

22 A I suppose so. It's not a question I

1 could answer one way or the other and give you an
2 explanation as to why I answered it that way.

3 Q Now, the person who Mr. Dooley was
4 reporting about was working in a reclaiming shed?

5 A I think so.

6 Q And this person was wearing a respirator,
7 but Mr. Dooley told him he needed to get a different
8 type of respirator, correct?

9 A I think so. I'm not absolutely sure.

10 MR. FROCKT: Would he be able to review
11 that part of the document or do you want to keep
12 asking questions?

13 MR. MESHER: I will keep asking. It's
14 just on the top of the next page. It makes reference
15 to the respirator.

16 THE WITNESS: Yes. I see what you mean.

17 BY MR. MESHER:

18 Q Mr. Dooley came back to the Port Arthur
19 work in 1952. Were you provided any information
20 about that?

21 A I don't think so.

22 Q You are aware that the problem that

1 Mr. Dooley reported about in 1949 was resolved when
2 Mr. Dooley went back to the refinery in 1952?

3 A Mr. Frockt told me something to that
4 effect. I have not seen the document, but I
5 understand at least this particular problem that
6 Dooley called attention to the record indicates that
7 that had been cleaned up.

8 Q Mr. Dooley appeared to be a conscientious
9 industrial hygienist when he wrote his 1949 survey.
10 Is that correct?

11 A I don't see any reason to dispute that
12 based on what the survey says.

13 Q He had only been with Texaco for just a
14 couple of years when he was coming out with these
15 recommendations and this survey, correct?

16 A So I understand. Yes. Two or three
17 years.

18 Q That shows that he was a person of
19 integrity, willing to stand up and at least put pen
20 to paper his opinions and his observations in this
21 survey, correct?

22 A Well, all he's talking about is getting

1 the guy a new respirator here. It is not going to
2 costs Texaco a whole lot of money to do that.

3 Q No, sir. Excuse me. Through the entire
4 survey, he's talking about more than just what he
5 observed in the reclaiming shed, didn't he? Or have
6 you read the other portions of this survey?

7 A Well, I haven't sat down and studied this
8 thing with it in mind to, you know, answer questions
9 about what he said about lead and naphthenate or some
10 of the other substances he's discusses in here.

11 You know if you want go ask me questions
12 about these things, we can sit down -- I can sit down
13 and study the report, and I would be happy to answer
14 your questions.

15 Q Sir, my question to you was Mr. Dooley
16 was reporting more about than what he observed in the
17 reclaiming shed, correct?

18 A That's right. He points out there were
19 lead exposure hazards and other types of exposures
20 that some of which he found were not warranting
21 control measures and some of which he recommended
22 control measures for.

1 Q Sure. Now, let's talk a little bit about
2 asbestos and lung cancer. You make reference in page
3 11 of your declaration to case reports. What is a
4 case report?

5 A It's a report of the individual cases of
6 disease. It might be one case. It might be ten or
7 more cases. Generally the term refers to reports of
8 cases of disease without reference to a defined
9 reference population from which the cases are drawn.

10 Q Does --

11 A Numerically defined I mean.

12 Q Does a case report in essence present a
13 hypothesis as to what could be occurring that need
14 further studies?

15 A Some case reports clearly do serve that
16 purpose. Almost all of the cancer causing substances
17 that we know about today we started to learn about
18 through case reports.

19 Q Right. Now, I note in paragraph 26 you
20 make reference to the journal of industrial hygiene
21 and toxicology. Do you see that?

22 A Yes.

1 Q Was that the same journal that you
2 published the Fleischer Drinker?

3 A Sure.

4 Q Now, in Nordman which you make reference
5 there, not everyone in Nordman's study who was
6 exposed or Nordman report who was exposed to asbestos
7 came down with any asbestos type of injury or
8 disease, correct?

9 A Well, I think that they did, but the
10 reason they did was that these were selective cancer
11 cases.

12 Q But Nordman didn't report on the entire
13 population.

14 A No. He didn't do a survey of the
15 industry, and he didn't do a mortality study on the
16 industry. So, we don't have any sense of -- We don't
17 have a very good quantitative sense of what the
18 excess risks were although he does say in Germany as
19 in England Nordman was aware of 12 autopsied cases of
20 asbestosis, and both countries two out of 12 also had
21 cancer of the lung.

22 Q Nordman talked about an increased risk.

1 Is that correct?

2 A Well, he called it the occupational
3 cancer of asbestos workers. So, I guess you could
4 say he did.

5 Q Now, have you done any analysis of
6 workers' compensation acts? Have you looked at, for
7 example, the Washington Workers' Compensation Act?

8 A I might have seen it. Over the years, I
9 have been shown some of the state laws, and I don't
10 remember which ones I have seen.

11 Q Is it your understanding in order to be a
12 compensable disease under the Washington State
13 Workers' Compensation Act that you have to have some
14 type of impairment?

15 A That wouldn't surprise me, but I really
16 don't know about these details. I would assume that
17 that would be the case. Again, I don't know.
18 Maybe -- I just don't know how the law speaks on
19 these questions.

20 Q The average person wouldn't consider
21 himself to be injured merely because they inhaled
22 asbestos fibers, would they?

1 MR. FROCKT: Objection. Speculation. I
2 object to form.

3 THE WITNESS: Depends on what they knew
4 about hazards of asbestos. Some people who have
5 inhaled asbestos fibers who have seen doctors and
6 have been told that the doctors don't see any
7 asbestos disease are still scared to death about
8 asbestos fibers and what they think it might be doing
9 or is doing to their bodies.

10 BY MR. MESHER:

11 Q Do you think you have an asbestos-related
12 injury?

13 A No.

14 Q You believe you have asbestos fibers in
15 your lungs, don't you?

16 A I have certainly been exposed to
17 asbestos. My childhood exposure is described in
18 chapter 11 of the book.

19 Q And you don't believe that you have an
20 injury from your asbestos exposure, correct?

21 A All I can say is so far so good. I mean
22 people with less exposure than I had as a five- or

1 six-year old have in some cases developed
2 mesothelioma.

3 Q But you don't consider yourself injured
4 from your exposure asbestos, do you?

5 A It depends on what you define as injured.
6 It's all a question of how you define the term. I
7 just hope I never develop cancer from my asbestos
8 exposure. But I know that's a possibility that I
9 will develop cancer from my asbestos exposure.

10 Q You've had your lungs -- your chest
11 X-rayed. Is that correct?

12 A Well, not for the way that chest X-rays
13 are done for pneumoconiosis. I have had TB chest
14 X-rays in my 20s. I don't think I have had any since
15 then.

16 Q You have talked about the archives of
17 industrial hygiene and occupational medicine.
18 Information from Lamar University. You see that in
19 paragraph 28?

20 MR. FROCKT: Page 12.

21 THE WITNESS: Yes.

22 BY MR. MESHER:

1 Q When were you first aware that any --
2 that there was anything associated with the Texas
3 Company at Lamar University?

4 A I guess that would be within the last
5 several months.

6 Q Is that from Mr. Frockt or his law firm?

7 A Yes. And he has also provided me an
8 affidavit to that effect with the documents attached
9 with the stamps of the company on the pages.

10 Q Then you talk about Dr. Hueper, correct?

11 A Yes.

12 Q Dr. Hueper in 1948 reported that asbestos
13 was a doubtful carcinogen. Do you recall that?

14 A I don't recall Hueper reporting that it
15 was a doubtful carcinogen. Hueper was a member of
16 the committee in New York in I think 1949 that issued
17 a report in which I think they used the word doubtful
18 in describing unproven carcinogenicity for particular
19 substances.

20 Q Is that the Environmental and
21 Occupational Cancer in 1948 by Hueper that you are
22 referring to or something else?

1 A No. Let me see that.

2 Q Sure.

3 (Off the record.)

4 BY MR. MESHER:

5 Q Sir, I believe we left off asking you
6 about the public health report of 1948 Environmental
7 and Occupational Cancer by W.C. Hueper for --
8 published by the Federal Security Agency. In that
9 report was asbestos as a doubtful carcinogen. Is
10 that correct?

11 A That is indicated in the table, but the
12 incomplete copy of the report which you have provided
13 me I don't think includes the entire text on the
14 question of asbestos and cancer.

15 Q Sure. I apologize for not getting the
16 whole article for you today. But when I looked at
17 that table, it made reference to doubtful. Is that
18 correct?

19 A Yes, it does.

20 Q Thank you. You make reference to the
21 opinion that members of the API medical advisory
22 committee during the 1940s and '50s including Texas

1 Company officials were aware that asbestos was a
2 cause of cancer. What do you base that on?

3 A Well among other things, there is a
4 report by a Texas Company officials -- First of all,
5 the Texas Company was represented at the medical
6 advisory committee in 1945.

7 Q Are you referring to bituminous
8 compounds?

9 A The bituminous compounds report is one
10 thing the Texas Company contributed, and it makes
11 reference to asbestos as a carcinogenic agent.

12 Q Did the Texas Company to your knowledge
13 contribute anything else other than that article?

14 A No. But they were present and
15 participating in the work of the medical advisory
16 committee and subcommittees including the
17 subcommittee on cancer or carcinogenicity.

18 Q What leads you to believe that it was the
19 practice of that committee to circulate copies of
20 memorandums to their members?

21 A Well, you mean minutes of meetings.
22 Those things I would assume were circulated to

1 is indicated that two members of the API medical
2 advisory committee. And here is another report that
3 talks about asbestos as a cause of occupational
4 cancer and references the publication of, the
5 publications of German authors as well as some
6 publications by Dr. Hueper.

7 Q The German authors are published in
8 German language? Is that correct?

9 A Yes. Some of these papers were the
10 subjects of abstract in English. Lensback and
11 Vagler, and Nordman. But they were originally
12 published in the German language. Apparently that
13 presented no problems for the chemist Zuidema who I
14 believe was Dutch.

15 Q You notice at the top of that page makes
16 reference -- What does it say? Distribution to. The
17 language on there about who it was sent to?

18 A It says for information only. Not for
19 publication. A contribution of information to
20 members of the API medical advisory committee.

21 Q That type of language does not appear on
22 the 1937 Bonsib article, does it?

1 A Not the copy that I have here. No.

2 Q Okay. The IHF, Industrial Hygiene
3 Foundation. We talked earlier about the basis of
4 your understanding as to when it was a member, when
5 Texaco was a member, correct?

6 A Yes. I think we covered that thoroughly.

7 Q You have no information to indicate that
8 Texaco was a founding member of the IHF, correct?

9 A Correct. Although come to think of it,
10 they may have been present at the founding meeting in
11 1935. I would have to go back and look at the list
12 of people who were present at the founding meeting.

13 I have actually a memorandum courtesy of
14 Dr. Lansa listing the names of all the people present
15 in January 1935 when they came up with the idea of
16 setting up the IHF.

17 Q Back to the API for a minute. They did a
18 survey in 1965 and 1966. Is that correct?

19 A They seemed to have started such a
20 survey. Yes.

21 Q Lousch and Renes, R-E-N-E-S, sent out a
22 letter indicating that they wanted to survey or

1 request the members of the API to submit information
2 on certain insulators, correct?

3 A Yes. I believe.

4 Q And that one of the things that Loush and
5 Renes stated was that unless two or more companies
6 can offer some definitive data or information the
7 survey report will consist of a review of the
8 literature in the hope that it will stimulate future
9 investigations among member companies. Do you recall
10 that?

11 A I see that. Yes.

12 Q And Texaco, my client, submitted
13 information to the API. In particular, Lousch and
14 Renes, in response to his request for information,
15 didn't it?

16 A I don't see something to Mr. Renes. I
17 see something to Mr. Tigh, T-I-G-H.

18 Q Right.

19 A Is that what you're referring to?

20 Q Are you aware that the information that
21 Texaco gathered at the request of the API was
22 forwarded on to the API?

1 A Well, I'm trying to establish whether or
2 not it was.

3 Q The Texaco representative, Ron Richards,
4 testified to that in his deposition.

5 A Okay. So, Mr. Richards, you say, has
6 testified that this information submitted March 11,
7 1965, strictly personal and confidential to
8 Mr. T-I-G-H in Houston was then passed along to the
9 people at the API?

10 Q Yes, sir. Were you ever aware of that?

11 A Well, I didn't know about the testimony
12 in the deposition.

13 Q And were you aware that the information
14 that was forwarded on to the API was more than just
15 the information contained in the March 11, 1965,
16 memorandum?

17 A Well, I didn't recall having seen
18 documentation to that effect although it may be here.

19 Q Now Mr. Renes wrote in April of 1965
20 that -- and enclosed a preliminary audit indicating
21 in part that they didn't have an adequate population
22 base to resolve the question as to the degree of

1 hazard which asbestos poses to refinery workers,
2 correct?

3 MR. FROCKT: Can the witness look at the
4 document itself?

5 MR. MESHER: Sure.

6 MR. FROCKT: Was that a quote?

7 MR. MESHER: Yes. This is on page three
8 of the conclusion.

9 THE WITNESS: Right. They say have
10 inadequate data to come to any conclusion.

11 BY MR. MESHER:

12 Q And that they should continue studying
13 this potential health problem. That was another
14 recommendation of Mr. Renes. Is that correct? This
15 is on the last -- page four of his report.

16 A Right. He warns that he doesn't think
17 this is an insignificant problem. He urges further
18 study.

19 Q Right. In fact, Alan Dooley took over
20 for Mr. Renes and attempted to complete this
21 compilation of information, didn't he?

22 A Well, I see a letter from Alan Dooley of

1 November 1, 1965, in this sequence of letters.

2 Q Right. He reports in part that there
3 appears to be some confusion about the health of
4 insulators because of an assumption among some
5 writers that all insulators are exposed only to
6 asbestos dust. Do you see that?

7 A Yes. I see that sentence.

8 Q And then Mr. Dooley on November 6 of 1965
9 reports that the medical director of one company that
10 manufactures a great deal of insulating materials
11 including asbestos products believes that the role of
12 asbestos as a health hazard among insulators has been
13 exaggerated in some reports. Do you see that?

14 A I see that sentence.

15 Q Do you agree with that?

16 A Well, I find it hard to believe that Alan
17 Dooley was such a fool that he would think that the
18 medical director of an asbestos manufacturing company
19 would be a reliable source of information of that
20 kind.

21 Q That's what he was reporting, correct?

22 A He simply says what this individual had

1 told him. That's right.

2 Q And then Alan Dooley continued to request
3 information through 1966 through the other members of
4 the API, correct?

5 A I am afraid I don't think I have seen
6 other documentation beyond November 1965 about what
7 Dooley was requesting from the other members.

8 Q You're not aware that Gulf Oil sent in a
9 letter of June 6th, 1966, reporting certain of their
10 findings?

11 A I don't believe I've seen that.

12 Q So, Texaco through Alan Dooley continued
13 to study this problem that Loush and Renes talked
14 about in 1965 in 1966, correct?

15 A They appear to be continuing to gather
16 data on the question of the mortality or at least the
17 presence of asbestos disease among insulators
18 retired, recently retired, and so forth.

19 Q And Alan Dooley was trying to get that
20 information to complete the study that Loush and
21 Renes was talking about, correct?

22 A It appears so. Yes.

1 Q Okay. Now, one of the things with the
2 insulators during that time period, Dr. Selikoff
3 wrote on --

4 MR. FROCKT: Clarify which time period.

5 MR. MESHER: Sure. 1965-1966.

6 BY MR. MESHER:

7 Q Dr. Selikoff, S-E-L-I-K-O-F-F, wrote in
8 the annals of the New York Academy of Sciences that
9 measurement of dust exposures of insulation workers
10 have been but infrequently reported and have been
11 hampered by the varied nature of the work.

12 As in other asbestos work, peak counts
13 are met with excessively high but generally counts
14 for asbestos fibers have been within the five million
15 particles per cubic foot MPC of the ACGIH. Do you
16 recall that?

17 A Yes. I recall that sentence.

18 Q Now, let's talk just for a minute about
19 the Industrial Health Foundation. You make reference
20 in paragraph 42 that the IHF conducted industrial
21 hygiene research and medical surveys for the various
22 asbestos companies and the Asbestos Textile

1 Institute. Is that correct?

2 A Yes.

3 Q Texaco was not one of these asbestos
4 companies or a member of the Asbestos Textile
5 Institute, correct?

6 A They were not.

7 Q The IHF also arranged closed informal
8 medical meetings among members in particular
9 industries. Do you see that?

10 A Yes.

11 Q Strike that. Texaco was not a
12 participant in such meetings to your knowledge, was
13 it?

14 A No. My knowledge about this is extremely
15 scant.

16 Q Okay. The Industrial Hygiene Digest.
17 What leads you to believe that it was printed and
18 distributed monthly to IHF members?

19 A Well, it was obviously distributed
20 monthly. I mean it was printed monthly. It was one
21 of the services of the IHF to its members. One of
22 the important services that they receive copies of

1 the Digest as part of the conditions of their
2 membership.

3 Q The Digest in line nine of page 17 you
4 make reference to an epidemiological report of
5 asbestosis and a cohort of insulators?

6 A Yes.

7 Q What are you referring to there?

8 A The reports of Frost and his coworkers in
9 the Danish Medical Bulletin published in 1956.

10 Q Where was that published?

11 A In a journal called the Danish Medical
12 Bulletin. The article was published in the English
13 language.

14 Q Was that published in the U.S.?

15 A No. But it was abstracted in at least
16 three places and was widely cited in subsequent
17 literature on asbestosis.

18 Q Paragraph 44, you make reference to the
19 Industrial Hygiene Digest published numerous other
20 abstracts. What are you referring to there?

21 A Well, there was the -- in 1949 the
22 journal of the American Medical Association,

1 editorial on asbestosis and cancer of the lung
2 abstracted in the Industrial Hygiene Digest in August
3 1949, and there were a number of other articles.

4 Let's see. I don't have a complete list.
5 The Frost article was abstracted in the Industrial
6 Hygiene Digest. The insulators in the Danish Medical
7 Bulletin in June of 1957. The article by Franchini
8 Canepa was abstracted.

9 This was an article describing, as I
10 recall, a man who had been run over by a street car
11 at age of 40. And he was a member of the cohort of
12 shipyard workers under study for asbestosis, and they
13 did an autopsy and verified this man had asbestosis
14 of the lungs.

15 Q Then asbestos and mesothelioma. We have
16 talked about Eisenstadt and Wilson, and we talked
17 about Vogner. You report in 1964 Selikoff reported
18 in his mortality study in JAMA? Is that right? This
19 is on paragraph 53.

20 A I am sorry?

21 MR. FROCKT: Page 20.

22 THE WITNESS: What about Selikoff?

1 BY MR. MESHER:

2 Q Selikoff you report in paragraph 53 that
3 he published a mortality study in JAMA.

4 A He did.

5 Q That didn't show that all persons who
6 were exposed to asbestos were certain to cause any
7 type of disease, correct?

8 A Well, this was a mortality study, and it
9 showed a large number of people died, excess deaths.
10 More than would have been expected from asbestosis
11 and occupational cancer, but not all of the deaths in
12 the trade could be attributed to asbestos disease.

13 It was also in 1946 that he made a
14 presentation at the annual -- at the meeting of the
15 New York Academy of Sciences in which he did say
16 something like 94 percent of the people in the
17 insulation trade had asbestosis 30 years after
18 starting in the trade if they had not already died
19 from some cause or another.

20 MR. MESHER: Objection, nonresponsive,
21 move to strike.

22 BY MR. MESHER:

1 Q Now, do you have any knowledge whether my
2 client Texaco deliberately intended to cause Mr.
3 Jameson to contract mesothelioma?

4 MR. FROCKT: Objection. It calls for a
5 legal conclusion as to the standard that we are
6 operating under this case.

7 THE WITNESS: I am sure what happened to
8 Mr. Jameson was not the direct result of personal
9 harm intended to him individually.

10 BY MR. MESHER:

11 Q You don't think Texaco willfully
12 disregarded the knowledge that they had in exposing
13 Mr. Jameson to any asbestos, do you?

14 MR. FROCKT: Same objection.

15 THE WITNESS: I think they did if they
16 didn't warn him about the hazards of asbestos or
17 protect him from the hazard of asbestos. It sounds
18 to me like willful disregard.

19 BY MR. MESHER:

20 Q What does willful disregard mean to you?

21 A That means you know that the person's
22 exposed to a mortal hazard and you neither warn him

1 about the hazard or means to reduce it.

2 Q So, you would also conclude that the
3 manufacturers of the asbestos-containing products
4 that Mr. Jameson was exposed to willfully disregarded
5 any knowledge that they had in exposing him to
6 asbestos-containing products when they didn't place
7 warning labels on boxes, correct?

8 MR. FROCKT: Same objection.

9 THE WITNESS: Yes. I think that they
10 also contributorily were responsible in the manner
11 that they neither warned, nor protected, nor gave him
12 the choice of protecting himself that would have been
13 available had they put warnings on these products
14 that properly disclosed the extent of knowledge
15 available about the hazard they posed.

16 BY MR. MESHER:

17 Q Are you aware of any literature that
18 talks about cellular injury from the inhalation of
19 asbestos?

20 A I've seen articles like that, but I don't
21 consider myself authoritative in analyzing the fine
22 points that they describe.

1 Q Was the TLV that was adopted in the
2 guidelines through the ACGIH widely accepted?

3 A Well, you mean prior to 1967?

4 Q Yes.

5 A Well, it was accepted in a number of
6 states. It was kind of accepted by default. There
7 were state agencies that were looking around for some
8 kind of guidelines, and the only -- the ACGIH had by
9 that time become the only game in town.

10 Q Washington. Did Washington adopt the TLV
11 or do you know?

12 A Well, there was no Occupational Safety
13 and Health Administration in the 1960s. The law
14 creating OSHA didn't come until -- it was not enacted
15 until the end of 1970.

16 Q I am sorry. I meant the State of
17 Washington. Sorry.

18 A I don't really know about the State of
19 Washington's adoption, or non-adoption, or reliance,
20 or whatever on the threshold limit values in terms of
21 the official state policy and how it may have been
22 expressed.

1 Q Through the literature that you have
2 reviewed, is it more likely than not that the
3 refinery workers exposed to asbestos would not
4 contract an asbestos-related disease as a result of
5 refinery exposure?

6 MR. FROCKT: Objection. I think that
7 goes beyond the proffered testimony of this witness.
8 It calls for a conclusion which we have not presented
9 him to offer. Having said that, I will let the
10 witness answer, if he wants to.

11 THE WITNESS: That's right. I don't
12 testify on causation in these cases.

13 BY MR. MESHER:

14 Q I was asking whether or not the reported
15 literature you are aware of reports whether it is
16 more likely than not that a refinery worker exposed
17 to asbestos would not contract an asbestos-related
18 disease as a result of refinery exposures.

19 MR. FROCKT: Same objection.

20 THE WITNESS: I don't think that the
21 literature is perfectly clear on this question. The
22 literature published by Selikoff in 1964 and 1965

1 indicated that insulation workers at least would be
2 expected to. The vast majority of them we're talking
3 about. I think 94 percent with more than 30 years in
4 the trade, 86 percent with more than 20 years in the
5 trade had asbestosis.

6 And as to mortality, something like 40
7 percent, I think, would -- could be said to have died
8 from occupational cancers and asbestosis. So,
9 Selikoff showed at least with respect to insulators,
10 you did have, you know, a very strong chance -- more
11 than an even chance of developing an occupational
12 disease if you had a career of working the trade.

13 Now, I think that would have been
14 applicable to insulators who work in oil refineries.
15 The insulators studied by Selikoff did include people
16 who worked in oil refineries.

17 MR. MESHER: Objection, nonresponsive,
18 move to strike.

19 BY MR. MESHER:

20 Q Sir, when was it reported in the
21 literature about household exposures to asbestos and
22 when that hazard was appreciated?

1 A Well, Hueper warned of neighborhood
2 exposure back in 1950. Household exposure, again,
3 this is covered in chapter seven of my book. And the
4 real definitive evidence of that didn't appear until
5 Selikoff's conference in 1964 in New York with the
6 presentation that I summarize in number -- item 54 in
7 the declaration.

8 Q Now, it says Dr. Castleman may testify
9 that all defendants conspired to suppress
10 information. Do you see that?

11 MR. FROCKT: What are you referring to?

12 MR. MESHER: The declaration. I am
13 sorry. The disclosure.

14 MR. FROCKT: I don't have a copy of mine.

15 MR. MESHER: Here. I think that's
16 Exhibit 2. I think I have it highlighted.

17 THE WITNESS: Conspired?

18 BY MR. MESHER:

19 Q Yes.

20 A I see that.

21 Q What information do you have concerning
22 your opinions on conspiracy on my client, Texaco?

1 MR. FROCKT: We will stipulate we are not
2 going to offer that kind of testimony with Dr.
3 Castleman.

4 MR. MESHER: Okay.

5 BY MR. MESHER:

6 Q The last thing in here, there are two
7 other things. You were going to talk about exposure
8 levels through asbestos and at what levels asbestos
9 may cause disease. That is what your disclosure
10 talks about?

11 A To the extent that that's reflected in
12 the medical and scientific literature, I might make
13 reference to it. I wouldn't normally expect it to be
14 something I would cover in trial.

15 Q That's normally outside the scope of your
16 testimony?

17 A Yes. Sounds like stuff that would
18 normally come in through industrial hygienists or
19 physicians. There is a table of stuff that -- table
20 four in chapter four of my book talks about.

21 Q That's what you rely upon?

22 A About published literature on exposures

1 for people doing insulation work and other kinds of
2 activities.

3 Q Okay. Availability of materials as
4 substitutes for asbestos and information concerning
5 substituting these materials appeared in the medical
6 and scientific literature.

7 MR. MESHER: Are you offering him on
8 that?

9 MR. FROCKT: We will, if asked. But we
10 are not for sure. But that would be something within
11 the scope of what he may be offered for.

12 I hope that is okay with you.

13 THE WITNESS: Well, I'm not delighted
14 with it.

15 MR. MESHER: He does not normally testify
16 to that.

17 MR. FROCKT: Why don't we explore that.

18 THE WITNESS: I have in the book on page
19 456 and 457 a section called Use of Mineral
20 Insulation in Oil Refineries and Industrial Plants in
21 the current edition of the book. This is a chapter
22 written by Steven Berger. I edited the chapter, but

1 I didn't write it.

2 BY MR. MESHER:

3 Q He is an attorney?

4 A He is not an attorney. He formerly
5 worked in the U.S. Patent Office. He's trained as a
6 chemical and environmental engineer and most recently
7 I think retired from the work for the government of
8 the State of California in water pollution control.

9 But he is really the expert on the
10 availability of substitutes, and there are certainly
11 a number of references he cites in this chapter.

12 Q You don't consider yourself to be an
13 expert in substitutes? Is that correct?

14 A That's correct.

15 Q Okay. You defer to someone else such as
16 Steven Berger to render opinions in that regard
17 concerning substitutes for asbestos products?

18 A Yes.

19 Q Just a couple of other questions. A
20 letter from Scowcroft to Lebel, November 1966. Do
21 you have a copy that? November 7, 1966?

22 A Maybe. What's that? Asbestos clothing

1 exposure?

2 Q Yes. I have got some of these things
3 that are circulated or that are circled, and we'll
4 mark that as an exhibit. And I just want to know if
5 you have copies of those?

6 A You have a lot of things circled here.

7 Q Yes.

8 A I may have them buried somewhere in my
9 files. Some of these things are things I have not
10 seen in a long time. The Scowcroft item is probably
11 from Raybestos-Manhattan documents. They have not
12 been involved in the asbestos litigation for almost
13 15 years.

14 MR. FROCKT: You want him to go through
15 with respect to each one circled whether or not he
16 has these documents?

17 MR. MESHER: Yes.

18 MR. FROCKT: Why don't we mark it as an
19 exhibit and identify it by the number.

20 (Castleman Exhibit Nos. 2 and
21 3 were marked for
22 identification.)

1 MR. FROCKT: Counsel, what you would like
2 him to do is look at Exhibit Number 3 and identify by
3 number, go through which of these documents he has?

4 MR. MESHER: Yes.

5 MR. FROCKT: Okay. The ones circled.

6 THE WITNESS: I probably have most, if
7 not all, of these documents. I would say I probably
8 have all but one or two. That would be my guess.

9 BY MR. MESHER:

10 Q Which ones do you think you don't have?

11 A I don't know. I would have to go through
12 my files. A lot of these are documents I have not
13 looked for for years.

14 Q Okay. That is fine.

15 MR. MESHER: I have no other questions at
16 this time.

17 EXAMINATION BY MR. FROCKT:

18 Q Just a few questions. Dr. Castleman,
19 have you ever in the past offered testimony regarding
20 articles that appear in trade journals pertaining to
21 alternative sources of materials other than asbestos
22 that could be used in industrial settings?

1 A Yes. I have been occasionally asked
2 whether such articles existed. And to that extent, I
3 am comfortable answering the question. Having seen
4 the articles and Mr. Berger's analysis of what they
5 say.

6 Q With regard to the IHF digest, the IHF
7 digest did not only print abstracts of journals that
8 appeared in U.S. or American medical industrial
9 hygiene literature, is that correct?

10 A That's quite right. They I think
11 describe it in the beginning of chapter ten where I
12 talk about IHF, that they drew their abstracts from
13 hundreds of journals published around the world.
14 Serving hundred of journals. I don't recall if I
15 reproduced the number. But at some point, they
16 provided some figures along those lines.

17 MR. MESHER: Objection. Nonresponsive,
18 move to strike.

19 BY MR. FROCKT:

20 Q But they were abstracts of reports from
21 other countries and other languages other than
22 English?

1 A That is certainly true.

2 Q In reference to counsel for Texaco asked
3 you questions about paragraph 28 of your declaration.
4 And this is the paragraph regarding the archives of
5 industrial hygiene and occupational medicine and
6 Lamar University?

7 A Right.

8 Q And you stated I believe in your answers
9 that you were able to look at a declaration provided
10 to you that had some attachments. Do you recall
11 that?

12 A Yes.

13 Q Sir, I am going to hand you this document
14 which we will identify as Number 4.

15 (Castleman Exhibit No. 4 was
16 marked for identification.)

17 Doctor, is that the declaration and
18 attached documents that you were referring to when
19 you gave that answer?

20 A Yes, it is.

21 Q Doctor, you were asked just briefly and
22 you can answer fairly briefly. You were asked about

1 the Fleischer Drinker study and conclusion number
2 four. Do you recall that part of the questioning?

3 A Yes.

4 Q And were there some other conclusions
5 from the Fleischer Drinker study that were also
6 provided besides what was in paragraph number four, I
7 believe?

8 A Yes, there were.

9 Q What were they?

10 A Well, I have them all quoted.

11 Q Could you summarize them for us?

12 A Yes. Basically the second one of these
13 recommendations reads the operations of band saw
14 cutting, of grinding, cement mixing, and insulation
15 on board ship should be equipped with exhaust
16 ventilation to keep the total dust concentration low.
17 So, there is a recommendation for worker hygiene
18 measures here.

19 Q Was that the only recommendation for
20 worker hygiene measures or were there others?

21 A Well, the report in the text of the
22 report talks about the use of respiratory protection,

1 and wet methods, and other approaches to reducing
2 dust exposure to workers, and trying to explain the
3 variability of the exposures that were recorded at
4 the various shipyards.

5 Q Do you have an opinion whether or not an
6 industrial hygienist reading that report in the
7 journal in which it was published would have had
8 those kinds of recommendations available to him or
9 her based upon the conclusions in the study?

10 MR. MESHER: Objection to form.
11 Foundation.

12 THE WITNESS: Well, the information of
13 the report was all available to the reader of the
14 report. People don't just read conclusion number
15 four when they read a report.

16 BY MR FROCKT:

17 Q Doctor, you have never met Alan Dooley,
18 correct?

19 A No.

20 Q So, I take it you would have no ability
21 to comment one way or another on his integrity or any
22 other aspects of his character?

1 A That's right.

2 MR. MESHER: Objection to form.

3 BY MR. FROCKT:

4 Q Doctor, what is the NCI in the lexicon of
5 your field?

6 A Well, the National Cancer Institute --

7 Q Is that the NCI?

8 A Yes, it is. It's the leading source of
9 information within the National Institutes of Health
10 in the United States Government on the subject of
11 cancer.

12 Q Did Dr. Hueper ever have any relationship
13 to the NCI?

14 MR. MESHER: Objection to form.

15 THE WITNESS: Yes.

16 BY MR. FROCKT:

17 Q Are you aware whether or not Dr. Hueper
18 had any such relationship with the NCI?

19 A Yes. In 1948, he was made the chief of
20 the environmental cancer section at the NCI, and he
21 held that post until he retired in 1964.

22 Q I am sorry. Would you say the years

1 again, please.

2 A 1948 to 1964.

3 Q Okay. Doctor, who was Dr. Kehoe, if you
4 know?

5 A Dr. Kehoe was a physician hired by the
6 lead industry who in my opinion was someone who was
7 basically a defender of the lead industry.
8 Publishing medical and scientific articles about the
9 potential hazard of lead exposure on the job.

10 MR. MESHER: Objection. That is beyond
11 the scope.

12 BY MR. FROCKT:

13 Q Are you aware of whether or not Dr. Kehoe
14 had a relationship with the American Petroleum
15 Institute?

16 A I don't believe I have come across any
17 contact although there may well be documentation
18 along those lines. I don't think I have seen it.

19 MR. FROCKT: I think that's it.

20 FURTHER EXAMINATION BY MR. MESHER:

21 Q Fleischer Drinker talked about work
22 aboard ships, correct?

1 A The subjects of their study were people
2 who worked in shipyards which included work aboard
3 ships as well as in the shops that serviced the
4 ships.

5 Q Do you know what the difference in a
6 exposure to a product is if you're in a confined
7 space or building as opposed to exposed to the
8 elements working outside?

9 A Well all of the things being equal, the
10 outdoor exposure would be less than the exposure in a
11 confined space with the same products doing the same
12 activities.

13 MR. MESHER: Thank you. I have no
14 further questions.

15 MR. FROCKT: What do you want to do about
16 this in terms of making it an exhibit?

17 MR. MESHER: Can the court reporter make
18 a copy of that and attach it to the deposition as the
19 next exhibit?

20 MR. FROCKT: You're talking about the
21 stuff within the binder clips?

22 MR. MESHER: No. The whole thing.

1 MR. FROCKT: All the documents?

2 Everything in here?

3 MR. MESHER: Yes.

4 MR. FROCKT: One is Ron Richards'
5 deposition. Do you want that?

6 MR. MESHER: Yes. There are some notes
7 on the back of that. Can you make a copy of that?

8 MR. REPORTER: Okay.

9 (Castleman Exhibit No. 5 was
10 marked for identification.)

11 MR. MESHER: I would like an ASCII, and
12 can you send me an e-mail copy.

13 (Whereupon, at approximately 6:00 p.m.,
14 the deposition ended.)

15 * * * * *

16

17

18

19

20

21

22

1 CERTIFICATE OF NOTARY PUBLIC

2 I, Ronnie C. Palmer, the officer before whom
3 the foregoing proceedings were taken, do hereby
4 certify that the foregoing transcript is a true and
5 correct record of the proceedings; that said
6 proceedings were taken by me stenographically and
7 thereafter reduced to typewriting under my
8 supervision; and that I am neither counsel for,
9 related to, nor employed by any of the parties to
10 this case and have no interest, financial or
11 otherwise, in its outcome.

12
13 My commission expires:
14 July 1, 2004

15
16 *R. Palmer*
17

18 NOTARY PUBLIC IN AND FOR THE
19 STATE OF MARYLAND

20
21
22