

1 SUPERIOR COURT OF THE STATE OF CALIFORNIA

2 COUNTY OF SAN FRANCISCO

3 (UNLIMITED JURISDICTION)

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5
6 DON FELKER and SHARON FELKER,

7 Plaintiffs,

8 vs.

No. CGC-06-456317

9 A.W. CHESTERON CO., et al.,

10 Defendants.

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12
13 TELEPHONIC DEPOSITION OF KIM E. ANDERSON O.M., Ph.D.

14 Wednesday, April 18, 2007

15 San Francisco, California

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17
18 Reported by:

19 CHERYL WILDER, CSR #7805

20
21
22 TOOKER & ANTZ

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CERTIFIED QUESTIONS

(None)

1 BE IT REMEMBERED that on Wednesday, April 18,
2 2007, commencing at the hour of 3:04 p.m. thereof, at
3 the offices of Tooker & Antz, 350 Sansome Street, Suite
4 700, San Francisco, California 94104, before me, CHERYL
5 WILDER, Certified Shorthand Reporter No. 7805, State of
6 California, duly authorized to administer oaths pursuant
7 to Section 2093(b) of the California Code of Civil
8 Procedure, personally appeared

9 KIM E. ANDERSON O.M., Ph.D.,
10 called as a witness by the Plaintiff; and the said
11 witness, being by me first duly sworn, was thereupon
12 examined and testified as hereinafter set forth.

13
14 APPEARANCES:

15 LAW OFFICES OF LEVIN SIMES KAISER & GORNICK LLP,
16 44 Montgomery Street, 36th Floor, San Francisco,
17 California 94104, represented by Jeffrey A. Kaiser,
18 Attorney at Law, appeared as counsel on behalf of the
19 Plaintiffs.

20 LAW OFFICES OF WILLIAMS KASTNER & GIBBS PLLC,
21 Two Union Square, 601 Union Street, Suite 4100, Seattle,
22 Washington 98101, represented by Christopher S. Marks,
23 Attorney at Law, appeared as counsel on behalf of the
24 Defendants Kaiser Cement and Kaiser Gypsum.

25 --oOo--

EXAMINATION BY MR. KAISER

Q. Dr. Anderson, my name is Jeff Kaiser. Can you hear me okay?

A. I sure can, Jeff.

Q. How are you today?

A. I'm very good. Thank you.

Q. Are you located today in Wisconsin?

A. In Elm Grove, Wisconsin.

Q. And are you alone?

A. Very much so.

Q. In life and otherwise?

A. I won't go that far, Jeff.

Q. I've had an opportunity to review some of your prior depositions. Do you recall the most recent deposition you gave in an asbestos personal injury case?

A. Yes, sir.

Q. When was that?

A. Last Friday.

Q. And do you have the case name in mind?

A. Oh, boy. I'm looking at my schedule book.

That would have been the Meyer case.

Q. Do you happen to know who plaintiff's counsel in that case is?

A. Mr. Wignon.

Q. What is the name?

1 A. Wignou I believe it was.

2 Q. I have a deposition that you gave on March
3 26th in the Barrett case. Do you remember that
4 deposition?

5 A. Yes, I do.

6 Q. How many depositions have you given in
7 asbestos personal injury cases this year?

8 A. This year, three or four I would guess.

9 Q. Have you testified in any trials in asbestos
10 personal injury cases this year?

11 A. I have not.

12 Q. Have you ever testified at trial in an
13 asbestos personal injury case?

14 A. The only testimony I would have given would
15 have been at an administrative hearing on an asbestos
16 case. Approximately 1980, I would guess.

17 Q. Is it still true that all of your work in
18 asbestos personal injury cases has been on behalf of the
19 defendants?

20 A. That is correct.

21 Q. And I understand that you're being offered in
22 this case by Kaiser Cement and Kaiser Gypsum?

23 A. Yes, sir.

24 Q. Have you been retained by those companies in
25 prior asbestos cases?

1 A. Yes, sir.

2 Q. Can you estimate when you were first retained
3 by those companies in an asbestos case?

4 A. I could only estimate.

5 Q. That would be fine.

6 A. That would be probably about two years ago.

7 Q. And can you estimate how many cases Kaiser
8 Gypsum and Kaiser Cement have retained you in?

9 A. Kaiser Cement, this would be the second case.
10 For Kaiser Gypsum, again, I can only estimate, probably
11 15 cases I would guess, maybe 20.

12 Q. You said 10 to 20?

13 A. 15 to 20.

14 Q. 15 to 20.

15 Let's do Kaiser Cement since this is only the
16 second case. Do you remember when the first case was?

17 A. That would be the case in which I was deposed
18 last Friday, the Meyer case.

19 Q. Which jurisdiction was that case pending in,
20 do you know?

21 A. I thought California.

22 Q. Does the name Paul, Hanley, Harley sound
23 familiar in that case?

24 A. No, sir.

25 Q. What information, if any, have you been

1 provided regarding Kaiser Cement asbestos-containing
2 products?

3 A. Verbal information from counsel.

4 Q. You said verbal information?

5 A. Yes, sir.

6 Q. And which counsel is that?

7 A. Attorney John Katerndahl.

8 Q. And when did you first speak with
9 Mr. Katerndahl about Kaiser Cement asbestos products?

10 A. Would have been before the Meyer deposition,
11 so within the last month.

12 Q. And what information did Mr. Katerndahl
13 provide you concerning Kaiser Cement asbestos products?

14 A. As to gun cement material contained the short
15 fiber chrysotile with a dry mix percentage of that
16 asbestos product far less than 5 percent, probably more
17 appropriately at 2 percent. That the material was
18 routinely mixed to, I guess, an aqueous state using
19 water. That the material could be both hand applied
20 generally by a trowel or it could be sprayed through a
21 gun-type delivery from a hopper and that the material
22 was a product that had a relatively short life with
23 asbestos. That the, again, the short fiber chrysotile
24 content was the mid-'50s until approximately 1975.

25 Q. Did he provide you any other information about

1 Kaiser Cement asbestos products?

2 A. No, sir, not that I recall.

3 Q. Did he talk to you about the Kaiser Cement
4 hand plastic cement product?

5 A. No, sir.

6 Q. Did Mr. Katerndahl send you any written
7 information concerning Kaiser Cement asbestos products?

8 A. I don't believe so.

9 Q. Prior to your deposition today, have you ever
10 seen any written materials concerning Kaiser asbestos --
11 Kaiser Cement asbestos products?

12 A. I don't believe so.

13 Q. Did you have a conversation with counsel in
14 this case prior to your deposition today?

15 A. Yes, sir.

16 Q. And who did you have that conversation with?

17 A. Mr. Marks.

18 Q. Was that over the phone?

19 A. Yes, sir.

20 Q. And when did that occur?

21 A. Last evening.

22 Q. For approximately how long did you and
23 Mr. Marks speak on the phone?

24 A. I would suggest about an hour.

25 Q. And what did you talk about?

1 A. And there was a second attorney.

2 Q. Who was that?

3 A. Phil Ward.

4 Q. Was anyone else on the phone call?

5 A. No, sir.

6 Q. And what did you guys talk about for that hour
7 last night?

8 A. The discussion started on it appeared the case
9 was going to go to trial and that I would be deposed
10 this evening at 5 o'clock central, that I could
11 participate by phone and there was discussion of the
12 materials I reviewed and my opinions following my review
13 of those materials, discussion of the dose
14 reconstruction that I was completing, brief discussion
15 on my opinions related to short fiber chrysotile, and to
16 Mr. Felker's employment history as I saw it. I believe
17 that was it.

18 Q. Did either Mr. Marks or Mr. Ward provide you
19 any information about Kaiser Cement asbestos products?

20 A. They confirmed much of the information as I
21 described I received from Mr. Katerndahl.

22 Q. Did you guys talk about hand plastic cement at
23 all?

24 A. I believe so.

25 Q. And what information was exchanged concerning

1 that product?

2 A. That that material was similar to the gun
3 cement, that it also contained the short fiber
4 chrysotile, specifically Grade 7, that that material
5 probably had in the neighborhood of 2 percent of the
6 short fiber chrysotile Grade 7, and that the date of
7 removal of the asbestos was similar, again, to the gun
8 cement and other Kaiser Gypsum products, 1975. I
9 believe that's it, sir.

10 Q. Did they tell you when asbestos was first used
11 in the Kaiser Cement hand plastic?

12 A. I don't recall them telling me. I think I
13 asked again if it was similar to other Kaiser Gypsum
14 products.

15 Q. And what did they say?

16 A. Affirmative.

17 Q. What are your opinions about short fiber
18 chrysotile?

19 A. That specifically Grade 7 short fiber
20 chrysotile is not related to the cause of the
21 toxicological actions that relate to the short fiber as
22 compared to amphiboles -- is not related nor is a
23 causative factor in the contraction of mesothelioma as
24 one would see with amphibole asbestos.

25 Q. Let's break it down for the jury. How many

1 different grades of short fiber chrysotile are
2 commercially used in the United states?

3 A. I'm trying to turn my computer off and see if
4 that is causing the buzzing on my end.

5 Q. You had testified that the information that
6 counsel for Kaiser Cement, Kaiser Gypsum provided to you
7 was that only Grade 7 short fiber chrysotile was used in
8 the Kaiser Cement asbestos products; is that correct?

9 A. Yes, sir.

10 Q. Is that also true for the Kaiser Gypsum
11 asbestos products?

12 A. Yes, sir.

13 Q. How many grades of short fiber chrysotile were
14 commercially used in United States?

15 A. Well, if you looked at joint compounds, not
16 just Kaiser Gypsum joint compounds, there were many
17 Grade 7 materials that were used. The RF, the M series.
18 I guess I could only estimate that there were numerous
19 of the Grade 7 classifications that had gone through the
20 Grade 7 screening.

21 Q. What does the Grade 7 classification mean?

22 A. The Grade 7 classification relates to the
23 processing. There is a series of sieves and screens
24 that are used as a process that the fibers in general,
25 as you progress down to the RF, the F notation is for

1 quotation, which generally relates to the chrysotile
2 shorts or what was termed in the industry at that time
3 as asbestos shorts.

4 Those went through the final screening to the
5 flotation process, which related to the fibrils actually
6 coming all the way through and having, again, the
7 shorter fibers at the end. Those fibers in general you
8 put it in a Grade 7. Most of the fibers would be less
9 or even substantially less than 5 microns, but in
10 general all fibers should be less than 8 microns in
11 length.

12 Q. Is all Grade 7 chrysotile short fiber?

13 A. All Grade 7 which I'm familiar, yes, sir.

14 Q. Have you heard the estimate that 95 percent of
15 the asbestos used in the United States commercially was
16 chrysotile?

17 A. I've heard the estimate as much as 97 percent.

18 Q. Do you have an estimate that you use?

19 A. In general, I would say in excess of 90
20 percent.

21 Q. Do you have any estimate of how much of that
22 chrysotile was Grade 7?

23 A. No, sir.

24 Q. Do you have any information whatsoever?

25 A. I believe in other cases, I've seen the

1 estimated tonnage on certain time periods as a Grade 7
2 that was introduced into commerce versus the tonnage in
3 that period, but I certainly don't recall those numbers
4 at this time, Jeff.

5 Q. So the jury understands this grading system,
6 how many different grades of chrysotile are there?

7 A. That, I don't know, sir.

8 Q. I mean Grade 7, does that imply there was a
9 Grade 1, a Grade 2, a Grade 3, so on and so forth?

10 A. They could have gone through the various
11 screening processes, but I've never seen information,
12 Jeff, to say that Grade 1 was used for a certain type of
13 product; if there was a Grade 2, the product it was used
14 for.

15 Q. Suffice it to say you don't know whether
16 Grades 1 through 6 chrysotile fiber were ever
17 commercially used in the United States?

18 A. That's correct.

19 Q. And you don't know whether Grades 8 or above
20 were ever commercially used in the United States?

21 A. That's correct.

22 Q. But it's your opinion that Grade 7 short fiber
23 chrysotile, no matter what quantity a person is exposed
24 to, would not cause mesothelioma?

25 A. Grade 7, as we relate to the fiber lengths,

1 it's coincidental that the fiber lengths then coincides
2 with Grade 7.

3 Q. What do you mean by that?

4 A. In other words, if it's less than 10 microns
5 in length, then my opinion is it would be short fiber,
6 and I would coincide with other researchers who have
7 stated that they don't believe the toxicity is such nor
8 is there a finding of toxicity of such related to that
9 fiber length and mesothelioma.

10 Q. I need to break this down to make sure I
11 understand what you're saying. Let's leave the Grade 7
12 aside for a moment. Okay. Let's just talk about the
13 fiber length. Is it your opinion that chrysotile fibers
14 less than 10 microns do not cause mesothelioma?

15 A. Yes, sir.

16 Q. So no matter how large the exposure for how
17 many years, it doesn't matter, it simply does not cause
18 mesothelioma?

19 MR. MARKS: Objection; form.

20 THE WITNESS: My problem with that is an
21 operating hypothesis is I could modify that to an
22 exposure that results in a dose of anything that one
23 might see from occupations in which that material may
24 have been used. In other words, I would have no
25 information related to someone who was exposed to, you

1 know, several million fiber years of that material
2 because that would not be coincidental with what we've
3 seen from exposures. So if we look at a reasonable
4 exposure resulting in a lifetime dose that applies to
5 that reasonable exposure, then I agree with your
6 hypothesis that that would not relate in the short fiber
7 chrysotile to the causation or relationship to the
8 causation of mesothelioma.

9 Q. BY MR. KAISER: I take it you reviewed various
10 published literature about exposure to short fiber
11 chrysotile?

12 A. That's correct.

13 Q. What is the biggest exposure you've come
14 across?

15 A. If one would look -- let's use an easy one for
16 example. The ATSDR toxicological profile for asbestos,
17 if we look at the doses that are included, I believe
18 it's Table 3.1, and we go specifically to those
19 exposures that relate to the contraction of
20 mesothelioma, we're talking exposures anywhere for a
21 mixed fiber exposure of chrysotile and amphiboles, the
22 lowest exposure that one would note in Table 3.1 would
23 be 10 fiber years per cc. And as you look at other
24 studies, Jeff, you go all the way up into, oh, gosh, I
25 believe it's over 100 fiber years per cc, again, either

1 a mixed fiber exposure or mixed fibers of amphiboles.

2 Q. So would your opinion be that if someone is
3 exposed at 100 fiber years per cc to only short fiber
4 chrysotile that they would not be at increased risk for
5 mesothelioma?

6 A. Yes, sir, from what I've seen.

7 Q. And you don't have a level at which you would
8 say you're not certain? In other words, if I said 500
9 fiber years, your answer would be the same?

10 A. I guess I've never contemplated a maximum
11 exposure, Jeff, of which, as a toxicologist, I would
12 have concern, so I guess I would like to withhold a
13 finite answer and I need to contemplate that.

14 Q. Of all the literature you've reviewed, what is
15 the highest exposure that you have identified that
16 someone has had to only short fiber chrysotile as
17 opposed to mixed exposures?

18 MR. MARKS: I'm going to object to the form.

19 THE WITNESS: Yeah, I guess I haven't
20 categorized the literature in that manner, Jeff. Rather
21 I've looked at exposures from working people utilizing
22 materials in which the fibers -- in which the materials
23 contained short fibers. Then, Jeff, I would further
24 review the literature to see if there was concomitant
25 contamination from amphiboles. And then predicated on

1 that, I would determine what the disease or disease
2 process might be. Instead of doing a laundry list of
3 doses and trying to relate a dose, I more looked at
4 fiber type.

5 Q. BY MR. KAISER: Can you think of any articles
6 that you've read that have discussed individuals who are
7 only exposed to short fiber chrysotile?

8 MR. MARKS: I'm going to object to the form.
9 Are you asking him for a cohort of short fiber
10 chrysotile only?

11 MR. KAISER: No. Just as I asked it.

12 MR. MARKS: I'll object to the form.

13 THE WITNESS: And I got lost. I'm sorry,
14 Jeff, could you repeat, please, sir?

15 Q. BY MR. KAISER: Of all the articles that you
16 have reviewed, can you name any that have discussed
17 individuals who are only exposed to short fiber
18 chrysotile?

19 A. There are studies that go through exposures
20 including calidria exposures. Burnstein has a study
21 that goes through, as I recall, the biopersistence and
22 the histopathology of that material. There are other
23 studies that relate to cohorts that are exposed to mixed
24 fibers. Included in their cohorts would be those who
25 are only exposed to chrysotile. Some of that work was

1 done by Roggli, by Victor Roggli over at Duke and his
2 work on chrysotile. There have been other studies that
3 relate to, as I sit here and think, by Hodgson and his
4 work related to the incidence of mesothelioma in the
5 British Isles if differing shaded between fiber types
6 and essentially looked over time at a variety of fiber
7 types.

8 I guess the landmark study on the Grade 7
9 would have been Wagner. Wagner's, it was either '79 or
10 1980 study when he looked specifically at Grade 7 and a
11 couple of other chrysotiles. And there was one more
12 study, Platek, that was a mid-'80s study where he looked
13 at Grade 7 exposure over a year. I forget the exact
14 time.

15 And then lastly the compilation that provides
16 good reliance and good evidence of exposure was the
17 ATSDR's short fiber group when they actually empaneled a
18 group, assimilated the data, looked at all the data, and
19 then issued their, whatever it was called, Influence of
20 Short Fibers, I guess, guideline or publication, for
21 lack of better description.

22 Q. Any others?

23 A. Sure. If I could sit here for a while, I
24 could think of others, but those come to mind rather
25 quickly.

1 Q. Would you consider those the most prominent
2 ones?

3 MR. MARKS: Objection; form.

4 THE WITNESS: I know Miller has done some
5 work. I believe that, again, those come to mind and if
6 I had a while to cogitate, I'm sure I could come up with
7 some others, but those --

8 Q. BY MR. KAISER: If you think of any as we
9 proceed, please bring them up.

10 Let's go back to the first one, the Burnstein
11 study on calidria. When was that published?

12 A. Within the last couple of years.

13 Q. Do you know the journal?

14 A. It was in Inhalation Toxicology, as I recall.

15 Q. And can you give me a sense of what they are
16 studying in that particular article?

17 A. Again, they were looking at the lack of
18 biopersistence of the calidria chrysotile as compared to
19 amphiboles. They also looked at the toxicological
20 activity in the lung, including inflammation, as I
21 recall, and they contrasted their findings by comparing
22 their findings on serpentine or chrysotile and amosite
23 or tremolite. I believe this one was tremolite, as I
24 recall.

25 Q. Did they actually review cases of individuals

1 who were only exposed to short fiber chrysotile?

2 A. I don't understand the question, I'm sorry.

3 Q. You indicated that they were looking at the
4 impact on lung tissue of the different fiber types;
5 right?

6 A. Yes, sir.

7 Q. Do you know, did they look at or review any
8 cases of individuals who were only exposed to short
9 fiber chrysotile or did they all have mixed exposures?

10 A. No, sir, my recollection is they were able to
11 find the cohort that had individual exposure to calidria
12 and others had either a mixed or solely tremolite.

13 Q. So they had part of the cohort of people whose
14 only asbestos exposure was to calidria?

15 A. That's my recollection.

16 Q. And calidria is a short fiber chrysotile?

17 A. Yes, sir.

18 Q. And is it Grade 7?

19 A. I believe so.

20 Q. And what was the conclusion of the authors on
21 the Burnstein study?

22 A. Again, they did not find the biopersistence of
23 the chrysotile. They did not find the marked
24 inflammatory process from the chrysotile. And I believe
25 they found that on the amphibole, that the fibers did

1 not tend to break apart and it did not appear to be as
2 susceptible, if one might call it that, to phagocytosis
3 or the alveolar macrophages.

4 Q. Is it still your opinion that an individual
5 needs an exposure of 10 fiber per cc years of amphiboles
6 to be at increased risk for mesothelioma?

7 A. No, sir.

8 Q. Do you have an opinion on that?

9 MR. MARKS: You're asking him what his opinion
10 is in terms of increased risk for exposure to the
11 amphiboles?

12 Q. BY MR. KAISER: Correct. Is there some
13 minimum dose that is required in your mind?

14 A. I guess if I was to look at a dose of
15 amphiboles, I would want to know essentially what type
16 of fiber, because I would concur with the risk
17 assessment that shows increasing potency as we would
18 move from tremolite to amosite to crocidolite. So I
19 would want to know the fiber type. From that, then I
20 believe I could look at the literature and provide a
21 dose of which I would have concern.

22 As I sit here today, I haven't been asked to
23 look specifically at amphiboles and determine a dose
24 response or potency relationship predicated upon those.

25 Q. So you don't recall in prior depositions

1 testifying that an insulator, for example, needed 10
2 fiber per cc years of exposure to be at increased risk
3 for mesothelioma?

4 A. If you look at the dose, no, I don't recall
5 that per se, sir.

6 Q. And for amosite, do you have a figure that
7 you're able to offer today in deposition as to the
8 minimum dose that you believe a person requires to be at
9 increased risk for mesothelioma?

10 A. If I was to look at amphiboles as a group and
11 their relationship from a dose perspective to an
12 increased risk of mesothelioma, I might well look at,
13 you know, 5 fiber years.

14 Q. But what if we only focused on amosite?

15 A. I believe that 5 to 10 fiber years would be a
16 valid dosage of concern.

17 Q. And do you have a number if it's just
18 tremolite?

19 A. No, sir. Again, I would put amphiboles in a
20 category of which once you increase the dose above 5, I
21 would have concern. Perhaps even lower.

22 Q. Is it your understanding that some chrysotile
23 has tremolite contamination?

24 A. Yes, sir.

25 Q. Do you know if any of the Grade 7 short fiber

1 chrysotile has tremolite contamination?

2 A. I guess when you throw the word "any" in, I
3 can't say that I know that. I know that the short fiber
4 chrysotile that is derived from Canadian Carey mines, we
5 have not seen tremolite contamination.

6 Rather if you look at the mines more in the
7 central and southern region, we have seen tremolite
8 contamination.

9 Q. Do you have any information about which mines
10 the chrysotile that went into the Kaiser Gypsum and
11 Kaiser Cement products came from?

12 A. Carey Canadian was my understanding.

13 Q. Do you know any more than that?

14 A. The Carey Canadian mines were in the north and
15 northeast part of Quebec, whereas the Bells and Thetford
16 mining region was more in the central and southern part
17 of Quebec.

18 Q. I'm sorry, was it your understanding that the
19 chrysotile that went into the Kaiser products came from
20 the Canadian Carey mines?

21 A. Yes, sir.

22 Q. And how do you know that?

23 A. That has been provided. Gosh, I even have
24 various invoices that have been provided over time to
25 show the sales of Canadian Carey materials to Kaiser

1 Gypsum.

2 Q. And where did you get those?

3 A. They were provided in other cases, in the case
4 materials I believe, Jeff.

5 Q. Do you still have those?

6 A. I'm sure I do, sir.

7 Q. How voluminous are they?

8 A. I don't recall. A number of pages, but I
9 don't recall.

10 Q. Do you believe those reflect the total
11 purchases of chrysotile asbestos by Kaiser Gypsum or
12 Kaiser Cement?

13 A. Oh, I would never suggest that I have every
14 document of every sales of every delivery of Carey
15 Canadian. I think that would be presumptuous on my
16 part.

17 Q. What years do those documents cover?

18 A. My recollection is either late '60s into the
19 early 1970s.

20 But, again, as I stated, Jeff, they were in
21 another case and I haven't looked at those in some
22 period of time.

23 Q. But you relied in part on those documents for
24 your opinion that the Kaiser products used Canadian
25 Carey chrysotile asbestos?

1 A. Yes, sir.

2 Q. Can you collect those so that we can mark them
3 as an exhibit to this deposition?

4 A. Certainly.

5 MR. KAISER: Why don't we go ahead and mark as
6 Exhibit No. 1 your CV, which was provided to us by
7 counsel. It has a date on the bottom of 4-2007.

8 (Deposition Exhibit No. 1 was marked for
9 identification.)

10 Q. BY MR. KAISER: I take it that is your current
11 CV?

12 A. I just prepared it.

13 MR. KAISER: And then let's mark as Exhibit 2
14 your notes that were provided in this case.

15 And then Exhibit 3 will be the documents that
16 you'll need to provide regarding the invoices for the
17 chrysotile asbestos to Kaiser.

18 (Deposition Exhibit Nos. 2 and 3 were marked
19 for identification.)

20 Q. BY MR. KAISER: Going back to this question of
21 which type of chrysotile asbestos was sold in the United
22 States, we have been talking about short fiber
23 chrysotile. Is there such a thing as long fiber
24 chrysotile?

25 A. There are longer fiber chrysotile, yes, sir.

1 Q. And do you know whether those were ever
2 commercially used in the United States?

3 A. Yes, sir, it's my understanding.

4 Q. And was it specific products that they were
5 used in?

6 A. My recollection is that some of the longer
7 fiber materials were used in frictional products and
8 some insulation products and in the textile world.

9 Q. And do you have an opinion about whether long
10 fiber chrysotile can cause mesothelioma?

11 A. I haven't thought of that either. Knowing the
12 way that the fibers, the chrysotile fibers are
13 detoxified, either through the self-defense mechanism of
14 the body, through the actual activities that happen in
15 the terminal portion of the lung, through phagocytosis,
16 through vascular transfer, I guess I would be very
17 surprised if we saw anything different from the longer
18 fiber than we've seen from the short fiber. But my
19 research, my work to date is centered around the short
20 fiber.

21 Q. Is that because you haven't been retained by
22 any defendant who used long fiber?

23 A. That's part of it. The other part of it is my
24 interest has resided on the short fiber.

25 Q. And what caused you to originally become

1 interested in the short fiber?

2 A. My employer.

3 Q. Is that A.O. Smith?

4 A. Yes, sir.

5 Q. I just got your CV right before the
6 deposition, so I frankly haven't had a chance to look
7 through it carefully, but have you ever published any
8 articles on asbestos?

9 A. No articles, no, sir.

10 Q. Have you ever given any professional
11 presentations concerning asbestos?

12 A. No, sir.

13 Q. In your current employment, other than your
14 consultation in asbestos personal injury cases, what
15 work do you do concerning asbestos?

16 A. I serve occasionally as a fact witness for
17 A.O. Smith. I have worked on surface and subsurface
18 contamination of soils from asbestos and I've worked on
19 regulatory compliance facilities who have had OSHA
20 inspections, Occupational Safety & Health Administration
21 inspections related to asbestos.

22 Q. Now, you indicated that your interest in short
23 fiber chrysotile first arose during your employment with
24 A.O. Smith; correct?

25 A. Yes, sir.

1 Q. Are they --

2 A. It goes back further than that. Excuse me,
3 Jeff.

4 Q. A.O. Smith products historically were boilers;
5 correct?

6 A. A.O. Smith had a water heater division of
7 which some asbestos products had been used in that they
8 made some rechargeable-type boilers on occasion.

9 Q. And did any of the asbestos products that were
10 involved in the A.O. Smith business involve any type of
11 asbestos fiber other than short fiber chrysotile?

12 A. I guess I'm not at liberty to discuss other
13 clients' cases, some of which might be in litigation.
14 That would include some of the questions you may want to
15 ask on this, Jeff.

16 Q. I only go there because you said that is where
17 your interest first arose.

18 A. Right.

19 Q. What work have you done other than reviewing
20 other people's work in terms of researching the toxicity
21 of asbestos fibers, whether they be chrysotile or
22 amphiboles?

23 A. My work on asbestos started in approximately
24 1974 when I joined the Occupational Safety & Health
25 Administration. I initially served on a task force in

1 which we were looking initially at the emergency
2 temporary standard that had been enacted for asbestos
3 and then as we went forward in looking at what had
4 happened on the June '72 regulation and how that was
5 applying, that I guess resulted in I conducted many
6 inspections from ship exposures to workplace exposures
7 in a variety of employments and reviewing records at
8 that time as we were trying to ascertain in the agency
9 an exposure base standard instead of going strictly with
10 recommendations by the American Conference of
11 Governmental Industrial Hygienists. That worked then
12 continued as I went into A.O. Smith, and A.O. Smith used
13 some asbestos products in some of their finished goods,
14 and has continued now into my consulting years.

15 Q. Have you ever been involved with any
16 epidemiological studies that concerned asbestos?

17 A. No, sir. Other than reviewing such when I was
18 with OSHA.

19 Q. Let's go back to the articles that you listed
20 concerning -- I guess it would be analysis of impact of
21 exposure to short fiber chrysotile. The next one you
22 listed were cohorts exposed to mixed fibers and you
23 mentioned Roggli. Now, Dr. Roggli, of course, has
24 published a number of articles and also books. Are
25 there particular articles or books that you're focused

1 on on this topic?

2 A. I know he had a publication in 2002 that
3 carried a title like Mesothelioma and Occupational
4 Exposure, as I recall.

5 Q. And do you recall what the conclusions of that
6 article were?

7 A. That amphiboles are the causative agent for
8 most of the mesothelioma cases that we see in the United
9 States.

10 Q. Do you know whether Dr. Roggli believes that
11 short fiber chrysotile can cause mesothelioma?

12 A. My understanding from reading his text and
13 reading his articles is he does not believe that
14 chrysotile in and of itself, regardless of the fiber
15 length, is a causative agent in the contraction of
16 mesothelioma.

17 Q. The next article you list, I couldn't actually
18 hear you, I think you said Hutchins?

19 A. Hodgson. H-o- -- how does he spell it --
20 H-o-d-g-s-o-n.

21 Q. I'm sorry, spell that again.

22 A. H-o-d-g-s-o-n.

23 Q. Okay. And do you know the name of the
24 article?

25 A. No, sir. It's related to death or mortality

1 from mesothelioma in Great Britain.

2 I think it's a prospective study, as I recall,
3 so he is preparing a model or he has prepared a model to
4 look at mesothelioma cases in the British Isles
5 prospectively.

6 Q. Do you know the year that it was published?

7 A. It has been within the last couple of years,
8 2004, 2005, I would suggest.

9 Q. And what is his conclusion?

10 A. That as he went through his model, and he was
11 working on validating a model by Peto that had been
12 prepared about a decade before, the Peto model and the
13 model of which Hodgson et al. prepared evaluated
14 exposures to both amphiboles and to chrysotile, and the
15 Hodgson et al. model's conclusion essentially gave no
16 weight to chrysotile exposures resulting in
17 mesothelioma.

18 Q. The next one you listed was Wagner. I think
19 you said from 1979 or 1980.

20 A. Wagner has several studies. The one I
21 recalled was his Grade 7 study. Yes, sir, I recall that
22 one.

23 Q. Do you know when that was published?

24 A. The early '80s, late '70s, somewhere in there.

25 Q. And what was his conclusions?

1 A. He looked with -- he looked at various types
2 of chrysotile, and I think for Grade 7 he didn't find
3 any malignant neoplasms. That's my best recollection on
4 that one, Jeff.

5 Q. When you say "he looked at different types of
6 chrysotile," what do you mean by that?

7 A. My recollection is he had two or three types
8 of chrysotile, including Grade 7.

9 Q. Do you know what the other types were?

10 A. I'm sorry, I just don't recall them at this
11 time.

12 Q. And do you recall whether he looked at cases
13 where individuals were only exposed to Grade 7
14 chrysotile?

15 A. I believe this was an animal study.

16 Q. The next one you mentioned was Platek from the
17 mid-1980s.

18 A. Yes, sir.

19 Q. Do you recall the title of his study?

20 A. Again, it's Inhalation of -- I don't know if
21 it's Grade 7 or Short Fiber Asbestos. It's something
22 close to that, Jeff.

23 Q. This is from the mid-'80s?

24 A. That's my recollection, yes, sir.

25 Q. And what were his conclusions?

1 A. That for animals exposed -- and there was an
2 extensive period of time for an animal study. I want to
3 say well over a year -- that they found no pulmonary
4 disease in the animals that they studied from this
5 long-term inhalation exposure study.

6 Q. And the last reference you listed was the
7 ATSDR short fiber group, the Influence of Short Fiber
8 publication.

9 A. Yes, sir.

10 Q. When was that done?

11 A. Boy, I don't recall the exact date.

12 Q. What is that organization?

13 A. The ATSDR?

14 Q. Yes.

15 A. The Agency for Toxic Substances & Disease
16 Registry. It's a group from the Public Health Service
17 that was empaneled to look at the toxicity of a variety
18 of chemicals that was related to the Super Fund
19 Amendment work that was being done and the concerns
20 about chronic exposures to a variety of chemical and
21 chemical agents.

22 ATSDR then has selected these various
23 chemicals based on the incidence that they find these at
24 Super Fund sites and the public concern. The ATSDR then
25 empanels a committee including their staff and other

1 outside experts and they compile the data and prepare
2 what is termed a toxicological profile that presents the
3 contemporaneous data, helps interpret the
4 contemporaneous data, and then shows the various issues
5 related to the exposures of humans, of animals,
6 exposures to the general environment. And then from
7 that, provides recommended exposure levels of concerns
8 in the toxicological profiles, especially for asbestos.

9 They also go through I guess what they term,
10 as I recall, relevance to public health. They also go
11 through the volume of materials, especially on asbestos,
12 that have entered the environment and then especially on
13 asbestos they show the respective citations in
14 literature, relate those both to humans, to animals.
15 They compare and contrast then to acute, subacute, and
16 chronic exposures and establish doses that are related
17 to both an acute reaction and a chronic anomaly.

18 As they were going through asbestos, and my
19 recollection, the toxicological profile for asbestos was
20 either 2000 or 2001. They then decided they needed to
21 do more of an evaluation, especially on short fibers,
22 since many of the studies that they found on asbestos
23 there was mixed exposure in that you had chrysotile as
24 well as an amphibole, so they empaneled a group called
25 their short fiber group. They reviewed the literature.

1 They prepared their own opinions related to the short
2 fiber, and that had to be in the last, you know, three
3 or four years, I would guess, Jeff.

4 Q. Do you have any information as to why they
5 would be concerned from a public health standpoint of
6 segregating out short fiber for analysis?

7 A. I wasn't a member of the panel, and I'm not
8 privy to all of the reasons that they went through to
9 look at it other than, as I stated, many of the studies
10 we have mixed exposure and they hadn't had the
11 opportunity to look at some of the literature I
12 described, assess that literature and just look at short
13 fiber exposure in and of itself.

14 Q. Did they specifically look at different fiber
15 types? In other words, did they look at crocidolite,
16 tremolite, and amosite?

17 A. Yeah. There is no way you can look at
18 asbestos without looking at all the fiber types, but the
19 emphasis, the direction that they were taking was
20 related to the short fiber and trying to understand
21 short fiber chrysotile and its role in any disease
22 process or lack thereof. So, sure, they had to look at
23 all fibers. You couldn't independently look in a vacuum
24 and do a proper evaluation. But the emphasis was to try
25 to segregate again the influence of the short fibers of

1 chrysotile and what that meant toxicologically speaking.

2 Q. And what were the conclusions of this short
3 fiber study group?

4 A. The conclusions are many. It's a pretty
5 lengthy treatise and, Jeff, it goes through, gosh, a
6 variety of discussions related to if we are just looking
7 at the biopersistence factor, there is a whole section
8 that relates to the biopersistence factor. There is a
9 whole section that relates to the toxicological reaction
10 once you get a short fiber into the terminal portion of
11 a lung. Then it goes into discussions on how the whole
12 disease process of amphibole versus chrysotile happens.

13 So it's nothing that I can say is a single
14 finding or a single discussion. They look at all the
15 factors related to toxicology and to exposure and try to
16 break each of those factors apart, try to understand
17 those factors related to the differences that we have
18 between amphiboles and chrysotile and then present all
19 that data in a recent fashion.

20 Q. Now, you had testified earlier that the ATSDR
21 in their overall work actually quantify levels of
22 exposure to different toxins that could be hazardous.
23 Did I hear you right?

24 A. Yes, sir.

25 Q. Did they do that for asbestos?

1 A. Yes, sir.

2 Q. And did they do that for all fiber types or
3 only certain fiber types?

4 A. As we discussed earlier in the asbestos
5 toxicological profile, again I believe it's Figure 3.1
6 and Table 3.1, they display the salient issues related
7 to all of the studies they looked at starting with acute
8 exposures, going to chronic exposures.

9 On the chronic exposures, they differentiate
10 between pneumoconiosis, lung cancer, mesothelioma. For
11 pneumoconiosis, they will provide a no observable effect
12 level. For the respective cancers, including lung
13 cancer and mesothelioma, they will establish a cancer
14 effect level, which in our vernacular we have been
15 talking today would be called a dose. And they show
16 those respective doses for the various fiber types or if
17 it's a mixed fiber type, they show that as well. And
18 that will all be projected again on the figure and on
19 that table.

20 Q. I don't have the table in front of me so
21 you're going to have to walk me through it. But are
22 they saying that exposures below the dose level listed
23 will not cause, for example, mesothelioma?

24 A. What they are saying in this respective study
25 and they show, gosh, many studies, they will show the

1 dose that the individual had that resulted in the
2 material. They do not have what we might call a
3 prescriptive standard where they say you should not be
4 exposed above this, rather they take the data as it is
5 and project -- boy, off the top of my head, I would say
6 20 different studies that show the toxicological end
7 point being mesothelioma, they show the dose, they show
8 the type of fiber, they show the duration of exposure,
9 then they present the overall dose.

10 And, again, those doses, as I recall, for a
11 mixed fiber is as low as 10 fiber years for a
12 mesothelioma and then they go up substantially above
13 that. I recall where they have some doses, I think even
14 over 200 fiber years in some of the studies that they
15 project.

16 Q. Is there a dose listed for mesothelioma for a
17 chrysotile-only exposure?

18 A. I do not believe so. I think the only
19 chrysotile exposures are mixed, that there will be one
20 or more amphiboles as well as the chrysotile. That was
21 part of the reason for having the panel to look at the
22 short fibers.

23 Q. Did the short fiber group publish a similar
24 chart?

25 A. No, sir.

1 MR. KAISER: We've been going about an hour.
2 Why don't we take a short break so that Cheryl can rest
3 her fingers.

4 (The deposition was at recess.)

5 Q. BY MR. KAISER: Let's go back on the record.

6 The short fiber study group that we have been
7 talking about, do you know who funded their work?

8 A. They are a federal agency, so I assume it was
9 appropriations from federal government through the
10 Public Health Service.

11 Q. And do you know if the work was performed
12 under a contract?

13 A. That's my understanding, yes, sir.

14 Q. And do you know who the contractor was?

15 A. Not off the top of my head, no, sir.

16 Q. Do you have any information about whether the
17 work was completed?

18 A. You know, they published the treatise, so I
19 assume that the intended scope of work was completed at
20 that time.

21 Q. Do you have any information about whether the
22 contract was terminated?

23 A. No, sir, I don't.

24 Q. I'm not trying to be cute about it. Other
25 than information that one can glean from reading the

1 published article, do you have any background
2 information? Have you talked to any of the members of
3 the group?

4 A. No, sir.

5 Q. Okay.

6 A. And I didn't take your question that way.

7 Q. I didn't want to beat around the bush, given
8 the late hour.

9 Let's talk about other organizations that have
10 looked at the potential impact of chrysotile exposure on
11 human health. Are you aware of OSHA considering that
12 issue?

13 A. I'm aware in that I've heard rumblings about
14 the long discussed dissatisfaction with having all
15 fibers grouped under one permissible exposure limit was
16 going to be examined at some time by OSHA.

17 Q. What is the current OSHA PEL for asbestos?

18 A. 0.1 fibers per cc of air.

19 Q. And that's for all fiber types including
20 chrysotile; correct?

21 A. It does not differentiate between the fiber
22 types. I'm sorry, yes, it's for all fiber types.

23 Q. And when was that PEL promulgated?

24 A. 2003, I believe.

25 Q. And did OSHA publish any literature that went

1 along with that PEL; in other words, explaining their
2 rationale?

3 A. Yes, sir, there was a preamble.

4 Q. And have you reviewed that?

5 A. Oh, yes, sir.

6 Q. And other than the preamble that OSHA
7 published, anything else?

8 A. Well, they've had a variety of publications
9 over the years related to explaining where to find
10 asbestos, what to do if you find asbestos, and then some
11 technical documents that were distributed both only for
12 compliance officers as well as the general public.

13 So, yeah, there has been a lot of stuff over
14 the years.

15 Q. But in terms specifically of their reaching
16 the PEL of .1 fiber per cc, other than a preamble are
17 there other documents that OSHA published explaining
18 their rationale for that PEL?

19 A. Again, I remember a technical document, excuse
20 me, that was provided after the promulgation of the .1
21 fiber per cc PEL.

22 Q. And you've reviewed that?

23 A. I haven't in some time, but, yes, I did.

24 Q. Is it your understanding in arriving at the .1
25 fiber per cc PEL for asbestos that OSHA specifically

1 considered the question of whether the PEL should be
2 different for chrysotile than for amphiboles?

3 A. My understanding and recollection, Jeff, it
4 was the age-old question of do we separate physical
5 anomalies and try to come up with exposures that would
6 apply or do we want to have one universal PEL that
7 applies to all fiber types and all potential physical
8 anomalies, and that was the problem we've, you know, the
9 agency had always had on trying to streamline and have
10 prescriptive standards.

11 Q. In terms of mesothelioma in reaching the PEL
12 of .1 fiber per cc, do you recall in the materials that
13 you reviewed from OSHA whether they considered this
14 question whether short fiber chrysotile could cause
15 mesothelioma?

16 A. I believe they had a discussion that centered
17 on mesothelioma and OSHA being unable to differentiate
18 between whether or not chrysotile had concomitant
19 contamination from amphiboles or if it was just what we
20 might call pure chrysotile. I recall that in one of the
21 documents.

22 Q. But suffice it to say that at the time it
23 established PEL for asbestos of .1 fiber per cc, OSHA
24 did not conclude that there was a level of short fiber
25 chrysotile exposure that was safe?

1 A. Well, again, the PEL does not differentiate
2 between pneumoconiosis, pleural plaques, lung cancer, or
3 mesothelioma. And the rationale was let's establish a
4 one-stop shopping type of PEL that we don't have to
5 differentiate between toxicological end point and fiber
6 type, and that's essentially how, you know, the .1 fiber
7 came about. They looked at the resulting dose being
8 somewhere between four and five fibers depending on if
9 it's a 40-, 45- or 50-year working lifetime. From that,
10 then they were able to ascertain that if we use .1, we
11 know we're going to have a good impact on reducing
12 pneumoconiosis and other impairments. So that's how the
13 .1 came about.

14 If we want to call that a reducing hazard,
15 then perhaps one might define it that way. I define it
16 as they use the .1 to derive the lifetime dose related
17 to either 40-, 45- or 50-year working lifetime and that
18 dose would be protective of pneumoconiosis as being in
19 all likelihood the lowest dose physical anomaly one
20 could contract from asbestos inhalation exposure.

21 Q. Generally speaking, in terms of mixed fiber
22 exposures, do you believe that the lower exposures are
23 more linked to mesothelioma or to asbestosis?

24 A. I believe you could have asbestosis from lower
25 dose exposures, perhaps to any form of asbestos, is

1 because the way the interstitial fibrosis can come about
2 as you have a lack of clearance, as you have other, I
3 guess, metabolic functioning happening in the lung unit.

4 Q. Let's discuss other organizations that have
5 considered the question about whether chrysotile causes
6 mesothelioma or whether chrysotile is less potent in
7 causing mesothelioma. Do you know whether the EPA has
8 ever looked at that issue?

9 A. Well, I know the EPA, boy, they published a
10 technical support document in 2003 where they did a
11 couple things. One, as I recall, they said that
12 fibers, it was either 20 or 30 microns in length, are
13 probably not important toxicologically, but then they
14 narrowed it down to let's say 10 microns as being --
15 fiber length had to be greater than 10 microns to be of
16 toxicological significance.

17 Then, secondly, they derived a different
18 formula than we had classically used for the potency and
19 essentially when this document, they said -- I'm
20 recalling here that chrysotile is something on the order
21 of seven or 800 to 1,000 times less potent than
22 amphiboles. To me, that was a landmark because
23 heretofore we had -- most of us that did this type of
24 work had little -- or used different potency factors.

25 Q. And do you rely on that EPA technical support

1 document in your opinion?

2 A. I think it's a good document. I guess as you
3 have seen going through our discussion tonight, Jeff, I
4 rely on many documents, I don't rely on any single
5 document. I try to look -- I think your term would be
6 the preponderance of the evidence. I try to look at the
7 number of studies we have, the validation of those
8 studies, how those studies are carried out, and the
9 significance of the findings and the consistency of the
10 findings.

11 So is this EPA document important? Well, it's
12 important in the fact that it has the same opinions as
13 many of the other documents that I've talked about
14 tonight. It talks about fiber length. It talks about
15 potency in comparing and contrasting chrysotile to
16 amphibole. So, yes, all of that is important, but it's
17 not singularly important, it's important in the total
18 universe of the documents in which I review and rely
19 upon.

20 Q. I forgot to ask you. You mentioned earlier
21 that you had reason to believe that OSHA was considering
22 visiting the subject of whether short fiber chrysotile
23 can cause disease. Did I hear you right?

24 A. That was my understanding.

25 Q. What is that understanding based on?

1 A. I still have friends in the agency and before
2 John Miles retired, we had had that discussion at one of
3 our alumni meetings at the University of Oklahoma.

4 Q. So this is casual conversations as far as any
5 formal statements by OSHA?

6 A. Like I said, I wasn't on any panel and I
7 wouldn't describe myself as being an inner-sanctum of
8 OSHA and knowing everything they are doing in this day
9 and age.

10 Q. I'm not sure anybody does.

11 A. Yes.

12 Q. Going back to other organizations that have
13 looked at the question of whether chrysotile causes
14 disease at all or is less potent in causing disease than
15 amphiboles. Have you looked at the report by the World
16 Trade Organization on that issue?

17 A. World Trade?

18 Q. World Trade Organization.

19 A. I must admit, I'm not familiar with the World
20 Trade Organization.

21 Q. Have you, in your review of the public
22 literature, come across any articles that suggest that
23 some of the studies on chrysotile may be biased by those
24 who have financial interest in chrysotile sales?

25 A. I guess I've seen less from that perspective

1 than I've seen on those doing work related to trying to
2 show the toxicity of chrysotile.

3 Q. I'm sorry, what do you mean by that?

4 A. I've read and heard about one researcher who
5 is actually funded by Gary Gallagher, who I understand
6 does a lot of plaintiffs' work, and I guess I've seen
7 more scuttlebutt -- heard more scuttlebutt, I guess is a
8 better way to term it, from that perspective than I have
9 from the other perspective that you mentioned, Jeff.

10 Q. And who is that researcher?

11 A. Suzuki.

12 Q. And what scuttlebutt have you heard?

13 A. As I described it, he is funded by a
14 foundation that is funded by plaintiffs' attorney, Gary
15 Gallagher.

16 Q. Where have you heard this?

17 A. I've read it in some trial manuscripts.

18 Q. What percent of your income do you derive
19 currently from expert consulting and testifying work in
20 the asbestos personal injury litigation?

21 MR. MARKS: Dr. Anderson, before you answer
22 that, Jeff, can I ask you a question? Is there a
23 protocol on this in San Francisco County that all
24 experts are kind of providing the same information, is
25 asked the same type of question.

1 MR. KAISER: No, not that I know of.

2 MR. MARKS: So are you going to object if I
3 ask this question of Dr. Castleman, Dr. Hammar, and
4 Dr. Horn?

5 MR. KAISER: I don't know. It won't be me, it
6 will be Bill. He may, he may not.

7 But I can tell you, I don't want to play games
8 with you. It's routinely asked.

9 MR. MARKS: I realize that. I'm not going to
10 object to his personal confidential information as long
11 as you guys are going to provide the same information in
12 response to our questions.

13 MR. KAISER: You can object. Feel free. I'm
14 not going to stipulate to anything.

15 MR. MARKS: Well, Dr. Anderson, I'll let you
16 answer how you would like, but I just want some
17 clarification. I guess I don't have it.

18 MR. KAISER: No game rules.

19 Q. BY MR. KAISER: Can you answer that question,
20 sir?

21 A. Sure. Can I take a minute to answer it?

22 Q. Sure.

23 A. We're a firm with 23 offices, about 550 staff
24 members. I serve as regional operating officer,
25 managing what is termed as our Great Lakes Region, which

1 is something around half the company, half the offices.
2 My income is primarily a function of my position, not of
3 my practice. I could never charge another hour and my
4 income would be the same. So I have a hard time
5 answering that because I don't make any more money doing
6 a deposition at 6:30 at night than I would if I was
7 watching the evening news at this time, so I always have
8 trouble, when I'm asked that question, answering, Jeff.
9 I'm not trying to be cute. It's just that other firms,
10 other people in our company even, their compensation is
11 a function of what they do. Mine, as one of the top
12 three senior managers in our company, is not related to
13 me doing this kind of stuff.

14 Q. Well, aside from compensation, what percent of
15 your professional time do you spend consulting in the
16 asbestos litigation?

17 A. I would guess 40 percent of my time. Maybe a
18 touch more. I've never looked at my hours and broken
19 them out that way.

20 Q. Are there other individuals in your company
21 that also serve as expert consultants in the asbestos
22 litigation?

23 A. I have three junior level people in my office
24 who might help on some cases on literature review,
25 helping me pull many of the articles I talked about,

1 staying abreast with the literature, make sure I don't
2 miss something that comes out. I do -- I can't say I've
3 written every report that has ever been written on
4 asbestos in our office, but I think I have. And I know
5 I've given every sworn testimony that has ever been
6 given by our firm on asbestos. So if that helps.

7 Q. Yes, it does. Thank you.

8 A. Yes, sir.

9 Q. Let's focus on this case in particular.

10 When were you first retained?

11 A. I actually have the letter.

12 Q. Not how. When.

13 A. March 22nd, 2007, I received deposition
14 transcripts from Hassard Bonnington.

15 Q. And what did they send you in particular?

16 A. I can read it. I received the following
17 deposition transcripts of plaintiff Don Felker, direct
18 deposition taken November 7, 2006, discovery
19 depositions -- and I'll be brief here -- 1 through 7
20 inclusive, taken between November 8 and December 8,
21 2006.

22 Q. Have you been provided any other materials in
23 this case?

24 A. Yes, sir. I received --

25 Q. What are those materials?

1 A. I received -- you haven't made me open my file
2 until now, so give me a second -- I received a packet
3 related to Cafco Blaze-Shield materials.

4 Q. I'm sorry, say that again.

5 A. C-a-f-c-o Blaze-Shield materials.

6 Q. And what in particular did you get?

7 A. I just got -- I haven't even looked at it, so
8 we can have a maiden voyage here together. Included in
9 the packet -- I don't even know what this is. It's --
10 oh, plaintiff's interrogatories, excuse me. It's
11 response to plaintiff's interrogatories in the case of
12 Gail Sprinkling versus W.R. Grace. Also --

13 MR. KAISER: Why don't we mark that as
14 Exhibit 4, including the correspondence.

15 THE WITNESS: I also have, it looks like, a
16 product brochure on Cafco Blaze-Shield Fireproofing.
17 Give me a minute here.

18 There is a second, what appears to be, product
19 brochure on Cafco Sound-Shield.

20 There is a third one, product brochure, again,
21 on Cafco Heat-Shield. And that appears to be it.

22 Q. BY MR. KAISER: Why don't we include all of
23 those as Exhibit 4. The interrogatory responses, any
24 correspondence and the product brochures. Does that
25 make sense to you?

1 A. Are you talking to me now?

2 Q. Yes.

3 A. Sure.

4 Q. Because you're going to have to provide it to
5 the court reporter, so I want to make sure we're on the
6 same page.

7 A. Okay.

8 (Deposition Exhibit No. 4 was marked for
9 identification.)

10 Q. BY MR. KAISER: Do you know why you were sent
11 this information?

12 A. I questioned last evening about this material
13 and that was provided to me today.

14 Q. And what were you told?

15 A. I was told they would send me what I just
16 described.

17 Q. But did they say why they are going to send it
18 to you?

19 A. Because I questioned -- I wasn't familiar with
20 Cafco materials.

21 Q. And why did the subject of Cafco materials
22 even come up?

23 A. Because it was one of the exposures, the
24 Blaze-Shield that was listed by Mr. Felker during his
25 employment.

1 Q. So prior to receiving these materials, you
2 weren't familiar with that product?

3 A. No, sir.

4 Q. You don't know the asbestos content of that
5 product?

6 A. No, sir.

7 Q. You've never done any personal research?

8 A. Yes. I went on-line but everything is
9 contemporaneous. I couldn't find any historic
10 information related back in the '60s when Mr. Felker was
11 talking about using this material.

12 Q. And what did the materials that were sent to
13 you by counsel tell you about the Cafco product?

14 A. As I hope I stated, I just received these
15 before I left the office and printed them, so as I
16 described, we take the maiden voyage together in looking
17 at these. I haven't looked at them.

18 Q. So you're not in a position to talk about
19 those at this time?

20 A. No, sir.

21 Q. What else did they provide you?

22 A. I have a videotape deposition transcript of
23 George J. Humphries taken January 9, 1991 in the case of
24 George J. Humphries versus Abex Corporation, et al.

25 Q. And have you read that transcript?

1 A. Yes, sir.

2 Q. And do you know why it was sent to you?

3 A. Yes, sir.

4 Q. And why is that?

5 A. Because it describes Mr. Humphries' use of
6 Cafco Blaze-Shield at the Wells Fargo building, the same
7 Wells Fargo building that Mr. Felker testified to work
8 in.

9 Q. And what information did you find important in
10 that deposition?

11 A. One statement that Mr. Humphries made as he
12 was going through his discussion of how offensive it was
13 to work with this stuff, and it was something like he
14 couldn't get anyone to work on this job with this stuff
15 because it was so dirty and so dusty and so difficult to
16 breathe when the guys were working in the area.

17 Q. And when did you receive this deposition
18 transcript?

19 A. I don't recall if it was late last night or
20 early today.

21 Q. This, again, was after you talked to counsel
22 for Kaiser Gypsum and Kaiser Cement?

23 A. That's my recollection, yes, sir.

24 Q. And indicated to them that you didn't have any
25 prior knowledge about the Cafco glaze material?

1 A. The Cafco Blaze-Shield.

2 Q. Correct.

3 A. Fireproofing. Yes, sir.

4 Q. Have you ever seen any studies that measure
5 any airborne asbestos concentrations when the Cafco
6 Blaze-Shield materials are applied?

7 A. I have seen studies with other fireproofing
8 but not Cafco since I didn't know it existed until this
9 case.

10 Q. Let's make the deposition -- I'm sorry, what
11 is the name, George what?

12 A. Humphries. George J. Humphries.

13 MR. KAISER: Let's make that Exhibit 5.

14 (Deposition Exhibit No. 5 was marked for
15 identification.)

16 Q. BY MR. KAISER: Were you provided anything
17 else in this case?

18 A. I think that's all Volume 1 of Mr. Humphries.
19 I also have Volume 2. And Volume 2 of the videotape
20 deposition. And then I have Volume 1 of the discovery
21 deposition and Volume 3 of the discovery deposition.

22 Q. Let's just include all the Humphries
23 depositions as Exhibit 5, okay?

24 A. Yes, sir.

25 Q. Are we on the same page?

1 A. I'm making notes. If you give me one second.
2 Humphries' depos. Cafco. Yes, sir, I got it.

3 Q. Okay. Were you provided anything else by
4 counsel in this case?

5 A. I don't have anything else in my file. And I
6 don't recall any other -- I wasn't in my office all
7 afternoon.

8 MR. MARKS: Dr. Anderson, did you review the
9 Mangold transcript?

10 THE WITNESS: You're right.

11 MR. MARKS: I'm sorry, I want you to know what
12 he reviewed, Jeff.

13 THE WITNESS: Thanks, Chris.

14 I did receive an e-mail talking about a
15 deposition provided by, I believe it's Carl Mangold
16 related to his description of an aluminum smelting
17 operation similar to the one that Mr. Felker worked at,
18 which I think was Harvey. I'll have to look at my
19 notes. I believe it was Harvey where he -- Mr. Felker
20 stated he worked at and Mr. Mangold described the work
21 in the smelting operation like that operation that
22 Mr. Mangold worked. So I do have that e-mail.

23 Q. BY MR. KAISER: I'm sorry, is it a deposition
24 or an e-mail?

25 A. It's attached to the e-mail.

1 Q. The deposition is attached to an e-mail?

2 A. Yes, sir.

3 MR. KAISER: All right. Let's make that
4 Exhibit No. 6.

5 (Deposition Exhibit No. 6 was marked for
6 identification.)

7 Q. BY MR. KAISER: And when was the deposition
8 taken?

9 A. Again, I didn't go back into my office. I
10 don't know.

11 Q. And were you familiar with Carl Mangold prior
12 to the deposition?

13 A. I've heard of his name before. But I've also
14 been in aluminum facilities, both Reynolds and Alcoa
15 down in Bauxite, Arkansas when I lived there, so his
16 deposition is probably less important, but I will
17 nonetheless review it.

18 Q. Have you read it yet?

19 A. No. That's what I said. I haven't been back
20 in my office.

21 Q. I see. You got an e-mail saying a deposition
22 is attached, but you haven't read the deposition?

23 A. There you go.

24 Q. Okay.

25 A. I'm sorry, I did a poor explanation.

1 Q. Let's make Exhibit 6 both the e-mail and the
2 attachment.

3 A. Okay.

4 Q. And you just got that e-mail this afternoon
5 then?

6 MR. MARKS: Objection; misstates testimony.

7 THE WITNESS: I don't know if it came in late
8 last night or early this morning. I was in my office
9 for all of an hour today and I had to go to another job
10 site.

11 Q. BY MR. KAISER: Have you been provided
12 anything else?

13 A. I don't believe so.

14 As I look, I open my file, I have the
15 deposition transcripts I described and that's it.

16 Q. Did you ask counsel for any additional
17 information that you have not received?

18 A. No, sir.

19 Q. Now, Exhibit No. 2, the notes that you made in
20 this case, they are not page numbered, but I want to
21 make sure that I have the complete notes. Do you have
22 them in front of you, sir?

23 A. I do.

24 Q. On Page 1, what is the first sentence?

25 A. At the top it says "Summary." The first line

1 says "Father of Felker was a plasterer."

2 Q. Mine doesn't say "Summary," but that's my
3 first sentence.

4 A. Summary is at the very top. Maybe it didn't
5 get on the copy machine.

6 Q. My copy is not very good, I will tell you
7 that.

8 And then the last page, how does the document
9 end?

10 A. Well, then there is Page 2 of the summary. At
11 the bottom under "Home Remodeling," the last sentence
12 says "Member of several unions" and "unions" is
13 underlined.

14 Q. Okay.

15 A. Then there is a second set, for lack of better
16 description, that says "Felker Summary" at the top.

17 Q. Right.

18 A. And the first is "Roman I, Napa Valley
19 plastering slash Wesley Uffleman."

20 Q. Okay. I have that.

21 A. The second page is a continuation of that. It
22 starts three lines down with "C, Retirement Homes."

23 Q. Okay. We don't need to go through this
24 section by section. I just want to make sure that mine
25 starts and ends. The last page of the notes have some

1 dose calculations?

2 A. Yes, sir.

3 Q. All right. So that's your last page as well?

4 A. Yes, sir.

5 Q. And in between there is a bunch of pages where
6 you have reference to the page and line from the
7 deposition that you're reading; is that correct?

8 A. Yes. There is a set of pages for each
9 deposition transcript.

10 Q. As you're going through the deposition, what
11 causes you to note things? In other words, what are you
12 looking for?

13 A. Looking for his descriptions related to his
14 work career, anything related to his familial exposures
15 or potential exposures. I don't make any
16 interpretations. I rather do my best just to extract
17 what I believe is what his testimony says.

18 Q. And you do this work yourself?

19 A. Yes, sir.

20 Q. How many hours have you spent to date on the
21 Felker case?

22 A. I don't know.

23 Q. Can you estimate?

24 A. 30. I imagine something like that.

25 Q. So your primary focus in reviewing the

1 deposition is to identify his asbestos exposure
2 opportunities?

3 MR. MARKS: Objection to form; misstates
4 testimony.

5 THE WITNESS: Is there an objection?

6 MR. MARKS: Yes. Objection; form, misstates
7 testimony.

8 THE WITNESS: I looked, Jeff, for everything
9 from his family history all the way through his work
10 history and not just asbestos exposure, but what did he
11 do in general, to try to get a full flavor of his life.
12 And then from that, try to extract in the summary the
13 issues that relate to his specific work. And then from
14 that, I went to the third level that talks more
15 specifically about where he may have been exposed to
16 products that relate to Kaiser Gypsum or Kaiser
17 Permanente, Kaiser Cement.

18 Q. BY MR. KAISER: So the first two pages are
19 sort of an executive summary?

20 A. Was that a question? I'm sorry.

21 Q. Yes.

22 A. I wouldn't call it an executive summary. I
23 just tried to decant seven, eight deposition transcripts
24 into the issues that might have some substance and some
25 relationship to his exposure and his work career.

1 Q. Let's try to break it down. On Page 1 you
2 note that his father was a plasterer; is that correct?

3 A. Yes, sir.

4 Q. Did you believe that Mr. Felker had any
5 opportunities to be exposed to asbestos through his
6 dad's work?

7 A. I'm sure he did, but there was scant testimony
8 that really provided a great description on what
9 transpired in his home life.

10 Q. Why are you sure he would have been exposed to
11 asbestos through his father?

12 A. Well, if he wore home his work clothes, I'm
13 sure there was the opportunity for exposure.

14 Q. What years are we talking about?

15 A. Well, he was married in '50 something, '53.
16 So he would have resided in his house before then. Born
17 in '28. So we're talking the '30s through the '40s,
18 whenever he would have resided at home.

19 Q. Do you have any information about what
20 products his father worked with in the 1930s and 1940s?

21 A. Like I said, there was scant information
22 related about that.

23 Q. Do you have any reason to believe that any of
24 the products that his farther worked with in the 1930s
25 and 1940s could have contained asbestos?

1 A. I believe they sure could have.

2 Q. What is your basis for that?

3 A. Just the historical data that we see in the
4 literature, going all the way back to some of the first
5 studies that we saw related to asbestos exposures.

6 Q. Which products in particular do you think his
7 father would have worked with in the '30s and '40s that
8 contained asbestos?

9 A. Some of the actual plaster products that were
10 used had asbestos fillers. If he worked in any
11 facilities where there were any insulators in the '30s,
12 we were switching over to amosite at that time.

13 Q. Was there information in the deposition that
14 indicated that his farther worked around insulation?

15 A. No, sir. As I said, there was scant
16 information.

17 Q. Which plaster products contained asbestos in
18 the 1930s?

19 A. There were some products that had as a filler,
20 as I described, they didn't have the shrinkage issues,
21 but as they were applying it on the old lathe and
22 plaster applications, they found that by adding some
23 asbestos it helped the adherence factor. I don't recall
24 what brand.

25 Q. Do you have any information about whether in

1 the 1930s and 1940s the majority of plaster products
2 contained asbestos?

3 A. No. I would suggest it was the minority.

4 Q. Do you have any information about whether the
5 Kaiser Cement product, the plastic cement product in the
6 1940s contained asbestos?

7 A. My information says there was no such thing as
8 a Kaiser joint cement, gun cement product in the 1940s.

9 Q. How about the hand plastic cement product?

10 A. Again, my information shows it didn't come
11 about until the '50s.

12 Q. Is it your understanding that when Kaiser
13 first marketed the hand plastic cement that it contained
14 asbestos?

15 A. I don't know.

16 Q. Have you ever heard any information that they
17 started marketing it without asbestos in 1945 and didn't
18 add asbestos until 1960?

19 A. No, sir, I haven't heard that.

20 Q. Have you heard any information that they
21 manufactured the plastic hand cement in Southern
22 California without asbestos in the 1960s but they
23 manufactured it in Northern California with asbestos in
24 the 1960s?

25 A. No, sir, haven't heard that.

1 Q. If the minority of the plaster products in the
2 1930s and 1940s contained asbestos, would you be in a
3 position to say it's more likely than not that
4 Mr. Felker's father would have worked with those
5 minority of products?

6 MR. MARKS: Objection; form.

7 THE WITNESS: Again, I don't know. As I
8 stated, there is scant information other than he was a
9 plasterer.

10 Q. BY MR. KAISER: Any other opportunities you
11 think that Mr. Felker would have had during his
12 childhood to be exposed to asbestos?

13 A. Again, same answer. There was really scant
14 information. He worked on the farm. I just don't know.

15 Q. In terms of Mr. Felker's working career, when
16 do you believe he had his first opportunity for exposure
17 to asbestos?

18 A. I would have to put these in order. They
19 talked of his work at Curtis Insulation, where he used
20 Johns-Manville insulation on pipes and boilers.

21 Q. What year was that?

22 A. That's what I would say, I would have to pull
23 every one --

24 MR. KAISER: We've got another hour. Why
25 don't we take another short break and you can get these

1 organized so we can go through them.

2 (The deposition was at recess.)

3 Q. BY MR. KAISER: Back on the record.

4 We were talking about what you believe was
5 Mr. Felker's first occupational exposure to asbestos and
6 you indicated his work at Curtis Insulation; correct?

7 A. It was one of his first, yes, sir.

8 Q. And what year was that?

9 A. If I go in order as he mentioned in his
10 deposition, the actual first discussion of being an
11 insulator was at the Hanford Nuclear Facility for U.S.
12 Jenkins and Armstrong. That was as early as 1951,
13 including '52, '53 or '54.

14 Q. What type of work did he describe doing at the
15 Hanford Nuclear Facility?

16 A. That he was a laborer working with various
17 insulation products.

18 Q. Did you pick up whether he was actually an
19 insulator at this facility?

20 A. Well, he started -- yes, he ended up as, I
21 think his term was a permit man. That he started, as he
22 described, as a laborer. And then for Armstrong, when
23 he went after Jenkins to Armstrong, he worked first as
24 an asbestos apprentice the first year at Hanford and
25 then became a permit man the second year at Hanford.

1 Q. What is your understanding what a permit man
2 is?

3 A. Essentially he carried a card that would allow
4 him to perform insulation work.

5 Q. What asbestos products do you believe he was
6 exposed to during his work at Hanford?

7 A. Well, he describes that he worked with some
8 white, which well could have been chrysotile, some was
9 brown, which I assumed was amosite, and some was blue,
10 which I assume was crocidolite.

11 Q. Are you talking about raw fiber?

12 A. I'm sorry, I didn't hear that.

13 Q. You're talking about raw asbestos fiber?

14 A. He didn't describe it as such. He described
15 the bags of asbestos were mixed, so I assume it started
16 as the fiber, then it was mixed to the mud that would be
17 applied on some of the block insulation, which I assumed
18 when he described to be block that he meant the amosite
19 blocks, that as they would band them, then they would go
20 ahead and apply the mud over the seams and over the
21 block.

22 Q. Did you make any effort to quantify on a
23 fiber-year basis his asbestos exposure during his work
24 at Hanford?

25 A. No, sir. Just mentally I tried to compare and

1 contrast mentally what he could have been exposed to as
2 an insulator.

3 Q. What do you mean by that?

4 A. Well, I generally use three references if
5 there is an insulator involved, Balzer and Cooper,
6 Fowler, Cooper and Balzer, and then Nicholson. And if
7 we look at exposures, time-weighted average exposures
8 for insulators doing the type of work Mr. Felker
9 discussed, time-weighted average could be six fibers per
10 cc. So I look at it if he performed one day's
11 insulation work, he would have had a dose commensurate
12 with the type of doses I found essentially for his
13 working lifetime of the Kaiser products.

14 Q. Your opinion is that his asbestos dose as one
15 day as an insulator was equivalent to his career work
16 with the Kaiser Cement and Kaiser Gypsum products?

17 MR. MARKS: Objection; form.

18 THE WITNESS: It would be in the same range,
19 yes, sir.

20 Q. BY MR. KAISER: Did you come up with a total
21 fiber per cc estimate for the work at Hanford?

22 A. No, sir. As I said, I didn't go that far.

23 Q. What is the next work that Mr. Felker
24 described where you believe he had asbestos exposure?

25 A. Let me turn the page. That's when we have

1 some overlap on time. Again, when he talks more about
2 his work at Curtis in 1952 as well. And at Curtis he
3 describes four projects.

4 Q. And what are his job duties at Curtis?

5 A. Insulator.

6 Q. So I take it your opinions then would be
7 basically the same as they were with the Hanford
8 facility?

9 A. Yes, sir. He talks -- Curtis, as I recall,
10 yeah, mostly blue asbestos. So again crocidolite,
11 which, as we talked earlier, has the highest potency
12 factor of all the amphiboles.

13 Q. And what is your understanding that he was
14 doing with blue asbestos?

15 A. At one site in Montana he describes that he
16 was using mostly blue asbestos mud so then he would be
17 taking the mud and actually wrap -- or excuse me, take
18 any of the joints, take any of the elbows and hand apply
19 that material onto what he called half-rounds or any
20 other appurtenances that they were using for elbows on
21 the line.

22 Q. From your prior review of the literature and
23 prior cases that you've worked on, have you come across
24 insulators using blue asbestos in that application?

25 A. Yes, sir.

1 Q. And why would they be using blue asbestos as
2 opposed to chrysotile or amosite?

3 A. Why would they use it?

4 Q. Right.

5 A. I guess you would have to ask them. I mean,
6 it was an insulation product that was relatively easy to
7 acquire. I'm not trying to be curt. I guess I don't
8 understand the question completely.

9 Q. Well, I mean, blue asbestos used in the United
10 States in terms of total use of asbestos is very small;
11 correct?

12 A. From the insulation perspective, there was a
13 goodly amount of crocidolite that was used.

14 Q. Was it used in certain applications?

15 A. It could be used in any applications.

16 Q. What is the next work that he described you
17 believe he was exposed to asbestos?

18 A. Stern Rogers, second and third quarters of
19 1954, he was reinsulating smelter furnaces.

20 Q. So I take it your opinion there again would be
21 similar to those with his work at Hanford and Curtis?

22 A. Yes, sir, I believe so.

23 Q. What is the next job he described?

24 A. Claussen Gregory Company, December '52 through
25 January '53, he worked as a permit journeyman insulator.

1 Q. Again, your opinions would be the same as the
2 prior jobs?

3 A. I believe so.

4 Q. What is the next?

5 A. Vermiculite Construction, Potlatch, Idaho.

6 Q. What year was that?

7 A. He says it was the next job after January '53.
8 Without opening the deposition, I didn't note a date.

9 Q. Okay. That's fine. And what were his job
10 duties in that job?

11 A. He talks about insulating at a school also in
12 Potlatch, Idaho. He talks about working with half-round
13 insulation and mud, using both blue and white mud at the
14 Potlatch, Idaho site insulating about 300 feet of pipe.

15 Q. What is the next job that he described that
16 you believe he would be exposed to asbestos?

17 A. General Engineering, Inc. and it's a Dallas,
18 Oregon -- I don't know the pronunciation, "Dalees,"
19 "Dallas" -- '58 to the beginning of '61, working as a
20 pipe insulator with Johns-Manville half-rounds and
21 another half-round. He also used asbestos mud and
22 worked in boiler rooms. I think, yeah, he described
23 working with brown asbestos mud, which would be very
24 typical amosite.

25 Q. These various jobs being described from I

1 guess the early '50s now to the early '60s, did you pick
2 up a sense of how often he would actually work hands on
3 with asbestos products?

4 A. I guess I would have to look at each one.
5 Some of the jobs I concluded it was continuous, if not
6 nearly continuous work, especially the one site where he
7 talked of working on 300 or insulating 300 feet, which I
8 assumed were linear feet, of pipe.

9 Q. What is the next job you described that you
10 believe he was exposed to asbestos?

11 A. Harvey Aluminum.

12 Q. What years were those?

13 A. Beginning of 1961 until 1962, he insulated two
14 boilers in a 20-by-20 boiler room. I think, yeah, he
15 described that as being in '61. He talks about mixing
16 his own mud. And 20 percent of his time he performed
17 insulation work for Harvey Aluminum.

18 Q. What is the next job?

19 A. I need to open another depo. And we go to his
20 work where it's hard to differentiate if it was actually
21 for Wesley Uffleman or Napa Valley Plastering.

22 Q. What years was that work?

23 A. '63 to '66.

24 Q. 1963 to '66?

25 A. Yes, sir.

1 Q. And what were his basic job duties during
2 those years?

3 A. Plasterer-type work.

4 Q. And do you believe he would have been exposed
5 to asbestos during that work?

6 A. I believe he might have been, yes, sir.

7 Q. And to which products?

8 A. He describes two plasters or plaster products,
9 the Kaiser Gypsum and the Calavans.

10 Q. Now, is this the work that you started
11 actually performing the fiber-year analysis for?

12 A. Yes, sir.

13 Q. What years do you have him working with the
14 Kaiser plastic cement product?

15 A. Here we go. I have him working at the
16 apartment building site.

17 Q. Let me ask a different question and maybe
18 speed this up. In the 1963 to '66 time frame that we're
19 talking about, is it your understanding that all the
20 work that he was doing was as a plasterer?

21 A. Different projects, for example, the apartment
22 work, he said that 80 to 90 percent of his time was the
23 application.

24 Q. Application of plaster?

25 A. Yes, sir. That was my interpretation, yes,

1 sir.

2 Q. Now, in order to perform the dose analysis
3 that I guess is reflected, what, in the last two pages
4 of Exhibit 2; is that right?

5 A. It's two pages we talked about. I don't
6 recall the order in your pile, sir.

7 Q. Okay. What did you use as your fiber per cc
8 dose level?

9 A. If we'll look at the bottom of the page where
10 I take the total time, the dose is proportional to the
11 duration times the exposure or concentration. So from
12 the summation of all these times I converted it to
13 years. I took those years times the .376 fibers is the
14 arithmetic mean or average of exposures from a study
15 conducted by Riverside on the mixing and application of
16 their product in 1975.

17 Q. Do you have a copy of that study?

18 A. Yes, sir.

19 MR. KAISER: Let's make that Exhibit 7.

20 (Deposition Exhibit No. 7 was marked for
21 identification.)

22 THE WITNESS: Give me a second. Okay.

23 Q. BY MR. KAISER: So as I understand it,
24 Riverside is a competitor or was a competitor of Kaiser
25 in the plaster business?

1 A. That's my understanding.

2 Q. And they made an asbestos-containing plaster?

3 A. Yes, sir.

4 Q. And they did this study in 1975 to figure out
5 the potential exposures when working with the plaster?

6 A. Well, when others were working with the
7 plaster, they went to actual job sites.

8 Q. Did they hire some outside person to do this
9 study?

10 A. Yes, sir.

11 Q. Who was that?

12 A. I may have that study with me. I do.
13 Environmental Analysts, Inc.

14 Q. Is the .376 fibers per cc the level that they
15 identified?

16 A. They collected four samples during mixing and
17 four samples during spraying. I took the arithmetic
18 mean of the summation of those eight samples.

19 Q. Other than the Riverside study from 1975, do
20 you rely on any other studies or any other data in terms
21 of potential asbestos exposures when working with
22 asbestos-containing plaster?

23 A. No, sir.

24 Q. Are you aware of any other studies?

25 A. It was very difficult in the literature to

1 find other studies.

2 So I guess the answer is I found one study for
3 spray insulation that was a NIOSH health hazard. It was
4 evaluation, excuse me, NIOSH health hazard evaluation.
5 The material was completely inconsistent with the
6 composition of the Kaiser Gypsum product.

7 Q. Inconsistent in terms of the asbestos
8 percentage?

9 A. It had other additives that -- they had some
10 organic materials that could go into it. It was just
11 not even close to our material.

12 Q. And you didn't come across any other data
13 about fiber exposures when working with plaster
14 products?

15 A. No, sir.

16 Q. So after 1966, when is the next work he
17 described where you believe he had the opportunity for
18 asbestos exposure?

19 A. Bear with me. You have me throwing papers
20 everywhere here, Jeff.

21 Frank D. Smith.

22 Q. What year was that?

23 A. He didn't provide the exact year other than to
24 say it was right after the Wesley Uffleman era, so I
25 assumed it to be around '66, and that was consistent

1 with the testimony of Mr. Humphries.

2 Q. What were his job duties for Frank D. Smith?

3 A. Wells Fargo building.

4 Q. This is the new construction of the building?

5 A. Yes, sir.

6 Q. Here in San Francisco?

7 A. You got it.

8 Q. And what were Mr. Felker's duties during this
9 construction?

10 A. He talked about doing a lot of stuff from
11 insulation application that included both fiberglass and
12 asbestos, from spraying what he termed was insulation by
13 Cafco then later clarified as fireproofing. He provided
14 some plaster work. I think that's pretty well the
15 universe of what he did.

16 Q. And the Cafco fireproofing, that's what we
17 discussed earlier, you weren't familiar with that
18 product prior to talking to counsel?

19 A. I wasn't familiar. I asked counsel about
20 Cafco.

21 Q. But as I understand it, as you sit here today,
22 you haven't yet reviewed any materials that give you any
23 information about what the product was, how much
24 asbestos it had, what type of fiber, that sort of
25 detail?

1 A. No, sir.

2 Q. Are you familiar with any studies that are
3 data concerning asbestos exposure opportunities
4 generally when workers are applying asbestos
5 fireproofing?

6 A. Yes, sir. As I just described, I had the
7 NIOSH health hazard evaluation and I had some other
8 studies that related to application of spray-on
9 fireproofing.

10 Q. And do you have a fiber per cc average that
11 you used for that work?

12 A. I don't recall. I've never had an actual
13 project where I performed dose reconstruction for that
14 type of product, Jeff.

15 Q. During this work for Frank D. Smith, you
16 mentioned he did some plaster work as well; is that
17 correct?

18 A. Yes, sir.

19 Q. I'm sorry, did you answer?

20 A. Yes, sir. I'm sorry. Yes, I did.

21 Q. Do know which brand product he used for that
22 work?

23 A. He didn't describe.

24 Q. What is the next work that he described that
25 you believe he had an asbestos exposure opportunity?

1 Are you with me?

2 A. I haven't gone to sleep. I'm looking here.

3 I believe we would be into his self-employment
4 era.

5 Q. And which years were those?

6 A. I want to verify that, Jeff. Just give me one
7 minute, please, sir.

8 I don't see anything. '72 to '77. There was
9 other employment between then. Welder/painter,
10 painter/laborer. Skimming rapidly, I don't really see
11 anything until that self-employment era, which, again,
12 I'm counting this '72, 1972 to 1977.

13 Q. What type of work did he do during the
14 self-employment time?

15 A. He described both. Well, he did a lot of -- a
16 little bit of everything, including repair work at homes
17 and some stucco work.

18 Q. And during that work, what type of asbestos
19 products do you believe he would have been exposed to?

20 A. Well, he described the stucco product as the
21 Calavans again, rather than Kaiser. He described the
22 drywall products as four brands, Kaiser Gypsum,
23 Riverside, Hamilton, and USG, U.S. Gypsum, and possibly
24 Georgia-Pacific.

25 Q. Now, is this the time period that you did the

1 dose analysis for the Kaiser Gypsum joint compound?

2 A. Yes, sir.

3 Q. And, again, what fiber per cc level did you
4 use for that calculation?

5 A. I went directly to Verma and Middleton and
6 used the 2.1 fiber per cc exposure concentration in
7 combination with the duration that is shown.

8 Q. Are you familiar with any other studies or
9 data that measured asbestos release during work with
10 joint compound?

11 A. Yes, sir.

12 Q. And what ranges on a fiber per cc basis have
13 those studies or data shown?

14 A. On a time-weighted average, the Verma and
15 Middleton appear to be the most comprehensive and
16 provide some of the highest exposure concentrations we
17 see on a time-weighted average basis.

18 Q. What is the highest you've seen in any of the
19 data that you have reviewed?

20 A. There is higher short-term concentrations for
21 various activities from bag opening to mixing and,
22 again, I should preface this, I'm talking about joint
23 compound.

24 Q. Correct.

25 A. Kaiser Gypsum sheetrock or wallboard does not

1 contain asbestos, therefore, I'm exclusively talking
2 joint compound.

3 The studies may look at one aspect of bag
4 opening to mixing to application to sanding to cleanup
5 and some of the exposures on that would exceed the 2.1
6 fiber per cc time-weighted average I use, but no one
7 else from the Selikoff study to the study by Fischbein
8 to the study by Rhodes really goes into establishing a
9 time-weighted average. So I believe that the Verma and
10 Middleton is superior in that regard.

11 Q. Does that study also give you data about peak
12 exposures?

13 A. Again, it's, as I hope I've stated, it
14 provides concentrations perhaps in a five-minute sample
15 for the mixing phase, perhaps for a -- I don't have the
16 study with me -- perhaps 100 minutes for cleanup, but
17 it's the only study that I know of that goes ahead and
18 computes a time-weighted average for all of the
19 activities involved in utilizing, mixing, applying, and
20 cleanup of joint compound.

21 Q. But do they like, for example, provide the
22 peak measurement on a fiber per cc basis during sanding
23 of joint compound?

24 A. I'm sorry, I have another call coming in so I
25 got a beep. Go ahead again, please, Jeff.

1 Q. The Verma and Middleton study, do they provide
2 the peak exposure level on a fiber per cc basis during
3 sanding of joint compounds?

4 A. I don't believe so.

5 Q. Have you seen any study that provide that
6 data?

7 A. Again, some of the other studies will look at
8 one aspect and they may -- since my concern is always
9 all the operations that are conducted, I just find Verma
10 and Middleton superior.

11 Q. So based on your prior testimony about
12 chrysotile and its ability to cause mesothelioma, it
13 really wouldn't matter, would it, how much or how little
14 Mr. Felker worked with the Kaiser plaster and Kaiser
15 joint compound products in your mind because no matter
16 how much he worked with them, it still wouldn't have
17 contributed to his mesothelioma; is that correct?

18 A. Well, that's not what I testified. Again, I
19 testified that I don't have a dose derived upper limit
20 for concern of chrysotile. Therefore, the dose
21 reconstruction was imperative to be conducted for a
22 couple of reasons. One, to go through and to see if he
23 had some massive mini-fiber-year exposures that is
24 beyond what anyone has looked at in the literature.

25 Secondly, it was important then to conduct

1 just to see what his actual exposure was in comparison
2 to what he may have had during his career work as an
3 insulator.

4 Q. But even if he had worked -- let's use the
5 Kaiser Gypsum joint compound and the 2.1 fiber per cc
6 time-weighted average as an example. Even if he had
7 worked with that product during a 40-year working career
8 every day, wouldn't it still be your opinion that the
9 exposure from that product would not have contributed to
10 his mesothelioma?

11 A. If we're talking about somebody that they did
12 this every day over 40 years and he had this type of
13 exposure so that his dose would have been in excess of
14 80 fiber years, my answer would be I don't know, but I
15 would be of the position I would have to further
16 evaluate because we don't -- I don't believe -- I don't
17 believe we have looked at all the data at massive
18 exposures.

19 Q. But didn't you say earlier that even at a
20 hundred fiber years you didn't think -- of chrysotile
21 exposure you didn't think that caused mesothelioma?

22 A. Again, from what the ATSDR found, it doesn't
23 appear to. I said my point of concern on amphibole
24 starts around five to ten and if we had some massive
25 exposure to chrysotile, I would still want to look at it

1 because I don't think it's been examined because that's
2 an exposure we don't typically see.

3 Q. How would you look at it?

4 A. We would have to go through the literature
5 again and see what is out there in all the studies ATSDR
6 has. I would have to look closely again at all the
7 studies we went through and refine my evaluation of
8 those actually looking at the doses.

9 So, you know, I feel like you're trying to put
10 me in a box that I'm saying something I haven't said.
11 I'm saying at the type of exposures we have found for
12 Mr. Felker and others doing this type of work, that I
13 don't see a dose component, irrespective of toxicity, I
14 don't see a dose component of causation or relationship
15 to mesothelioma for this gentleman. However, if he had
16 some massive exposure, my mind is not at the point that
17 I would consider some aberrant dose of not requiring
18 further evaluation.

19 Q. Is there a threshold that you would consider
20 aberrant? I mean, is it 50 fibers per cc or 20 fibers
21 per cc?

22 A. I don't know. I know it's -- if you approach
23 a 40-working year lifetime that every day you were
24 exposed to 2.1 fibers per cc, I guess, talking off the
25 top of my head, I wouldn't know why he wouldn't have had

1 asbestosis. Regardless of whether or not he would have
2 some other physical anomaly, I would want to look at
3 this again. I think any scientist would want to look at
4 something like this, Jeff, because we don't see these
5 kinds of exposures.

6 Q. Typically we see mixed fiber exposures; right?

7 A. We see a lot of mixed fibers. We see a lot of
8 insulators who the majority of their career they had
9 individual exposures to chrysotile with some amphiboles
10 and then some amphiboles. So when we look at lung
11 burden, you probably see a little bit of both. You see
12 a lot of ferruginous.

13 Q. Well, do you think looking at Mr. Felker's
14 entire work history, his total dose of asbestos exposure
15 was sufficient to cause his mesothelioma?

16 MR. MARKS: Objection; form.

17 THE WITNESS: I think in doing -- and, first,
18 can I interject one thing?

19 Q. BY MR. KAISER: Sure.

20 A. There is a mathematical error I just noticed
21 sitting here on the dose reconstruction at the Summation
22 of Dose on the bottom of Page 2. The stucco dose on
23 Page 2, I put an extra zero in. It should be 0.116.
24 Rather early when I completed that and I guess the
25 coffee hadn't kicked in.

1 0.116 for stucco joint compound remains the
2 same, so that the total is 0.1559.

3 Q. 0.155 --

4 A. 9.

5 Q. Okay. And that's your calculation of his
6 lifetime dose to asbestos from working with Kaiser
7 Cement and Kaiser Gypsum products?

8 A. Yes.

9 Q. All right.

10 A. Now, to answer your question that stands, I
11 can empirically look at this, that if he worked as an
12 insulator for ten days, two working weeks, he would have
13 had a greater dose of asbestos exposure in ten days than
14 he had from all of his work with Kaiser Gypsum products.

15 Q. But in your opinion, would that ten days of
16 work as an insulator have caused his mesothelioma?

17 A. Well, first, that's an unfair question because
18 we both know what we have just gone over, he worked
19 many, many more than ten days.

20 Q. How many days do you estimate he worked as an
21 insulator?

22 A. I don't know, but it's many, many more than
23 ten days.

24 Q. Did you think it was enough to cause his
25 mesothelioma?

1 A. If we take his ten days times a factor of ten
2 to come up with 100 days, which is what, you know, less
3 than half of a year, he would have had a dose like 2.4
4 fibers per cc -- fiber years per cc, excuse me.

5 So then as you approach that then, yeah, I
6 think just on the amphibole alone, just from amphibole
7 there is enough information to tell us that that may be
8 well a dose that is related to the causation of
9 mesothelioma.

10 Q. So is it correct that you're of the opinion
11 that the asbestos exposure Mr. Felker received from
12 working with the Kaiser Cement and Kaiser Gypsum
13 products did not contribute at all to his mesothelioma?

14 A. I agree with you completely.

15 Q. Even, in fact -- and give me your total again
16 now because I don't have it written down -- the combined
17 total for the Kaiser products on a fiber year basis is
18 1.1 --

19 A. .1559 or if we want to be over conservative
20 .16.

21 Q. Can we just round it to .16, I was going to
22 say?

23 A. Yes.

24 Q. Even if it was 100 times more than that, so it
25 was 16 fiber years, would you still be of the opinion

1 that the asbestos from the Kaiser products did not
2 contribute to his mesothelioma?

3 A. I believe so.

4 Let me rephrase that so it's clear. I agree
5 with what you just said. A dose 100 times greater than
6 I show in my dose reconstruction, I do not believe would
7 be associated with the contraction of mesothelioma.

8 Q. Do you think he had any exposure to asbestos
9 after 1976?

10 A. He worked at Cargill '72 to '78, a small
11 amount of time as a laborer. I don't believe so. I
12 didn't look at it that way.

13 Q. I noticed in prior depositions that I read you
14 had always done a written report. Do you intend to do
15 one in this case?

16 A. I haven't been asked to do one, so I don't
17 know.

18 Q. I mean, is it your normal procedure to only do
19 one when you're asked?

20 A. Yes, sir.

21 Q. What other work do you intend to do before you
22 testify at trial?

23 A. Well, I've got to load up a bunch of stuff and
24 send it to the court reporter. I intend, unless I'm
25 instructed otherwise, to look at the Cafco material and

1 to look at Carl Mangold's deposition. And I believe
2 that would be it, sir.

3 Q. Do you have any standard demonstrative aids
4 you use at trial?

5 A. Since I haven't testified at trial, I don't
6 know. I'm sorry, it's kind of late here.

7 Q. I guess we'll find out.

8 A. Yes.

9 MR. KAISER: All right. I'm going to reserve
10 our rights to further depose you. First of all, under
11 the San Francisco General orders, we're required to
12 receive all the materials that the expert gets prior to
13 his deposition and since we didn't get that, on that
14 basis, but also on the basis if you do review additional
15 materials. But those reservations aside, I don't have
16 any further questions for you, sir.

17 Why don't we go off the record.

18 (The deposition concluded at 5:55 p.m.)

19 --oOo--

20
21 _____
KIM E. ANDERSON O.M., Ph.D.
22
23
24
25

1 CERTIFICATE OF DEPOSITION OFFICER

2 I, CHERYL WILDER, duly authorized to administer oaths
3 pursuant to Section 2093(b) of the California Code of
4 Civil Procedure, hereby certify that the witness in the
5 foregoing deposition was by me duly sworn to testify the
6 truth, the whole truth and nothing but the truth in the
7 within-entitled cause; that said deposition was taken at
8 the time and place therein stated; that the testimony of
9 the said witness was reported by me and thereafter
10 transcribed under my direction into typewriting by
11 computer; that the foregoing is a full, complete and
12 true record of said testimony; and that the witness was
13 given an opportunity to read and correct said deposition
14 and to subscribe same.

15 I further certify that I am not of counsel or attorney
16 for either or any of the parties in the foregoing
17 deposition and caption named, or in any way interested
18 in the outcome of the cause named in said caption.
19

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22 I hereby certify that this copy is a true and
23 exact copy of the original.

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9 Kastner & Gibbs PLLC

10 Two Union Square

11 601 Union Street, Suite 4100

12 Seattle, Washington 98101

13 In Re: Don Felker and Sharon Felker

14 vs. A.W. Chesteron Co., et al.

15 Dear Dr. Anderson:

16 Your deposition taken in the above-entitled matter has
17 been transcribed. The deposition will be available at
18 our offices for reading and signing by you for a period
19 of thirty (30) days from the date of this letter, after
20 which time the original of your deposition will be
21 sealed and sent to the office which noticed the
22 deposition, in accordance with Section 2025.520(b) of
23 the California Code of Civil Procedure.

24 Sincerely,

25 Tooker & Antz

cc: All counsel