

OFFICIAL TRANSCRIPT PROCEEDINGS BEFORE

THE UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

- - - - -X
THE 3250 WILSHIRE BOULEVARD :
BUILDING, et al. :
Plaintiff, :
vs. : No. 87-06048 WMB (CHKr)
METROPOLITAN LIFE INSURANCE :
COMPANY, et al. :
Defendants. :
- - - - -X

Deposition of WILLIAM V. CULVER



*Duplicate
File
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Seattle, Washington

December 12, 1938

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ERRATA SHEET FOR THE TRANSCRIPT OF:

CASE NAME: 87-06048 3250 WILSON BLVDCASE NUMBER: 87-06048DEPOSITION OF: WILLIAM V. CULVERIN THE COURT OF: THE UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIF.HELD ON THE DAY OF: DECEMBER 12, 1988IN THE CITY AND STATE OF: SEATTLE, WASH

CORRECTIONS

<u>Page</u>	<u>Line</u>	<u>Now Reads</u>	<u>Should Read</u>	<u>Reasons Therefor</u>
11	5	I'M SURE..	I'M NOT SURE..	
75	14	THIS IS A QUESTION	NOT AN ANSWER	
125	3	MR ROBERTS	MR ROBINSON	
157	21	GILLISON	KILLION	

W.V. Culver
Signature of DeponentFeb 3, 1989
Date of Signature

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1 IN THE UNITED STATES DISTRICT COURT
 2 FOR THE CENTRAL DISTRICT OF CALIFORNIA
 3 - - - - - x
 4 3250 WILSHIRE BOULEVARD BUILDING, :
 5 et al., :
 6 Plaintiffs, : Civil Action No.
 7 v. : 87-06048 WMB (GHKx)
 8 METROPOLITAN LIFE INSURANCE :
 9 COMPANY, et al., :
 10 Defendants. :
 11 - - - - - x

12 Seattle, Washington
 13 Deposition of WILLIAM V. CULVER, a witness
 14 herein, called for examination by counsel for Plaintiffs
 15 in the above-entitled matter, pursuant to notice, the
 16 witness being duly sworn by ALLAN M. JOHNSON, CVR, a
 17 Notary Public in and for the State of Washington, taken at
 18 the offices of Lane, Powell, Moss & Miller, 37th floor,
 19 Rainier Bank Tower, Seattle, Washington, at 10:00 a.m., on
 20 Monday, December 12, 1988, and the proceedings being taken
 21 down by Stenomask by ALLAN M. JOHNSON, and transcribed
 22 under his direction.

C O N T E N T S

2	<u>WITNESS</u>	EXAMINATION BY COUNSEL FOR
3	WILLIAM V. CULVER	<u>PLAINTIFF</u> <u>DEFENDANT</u>
4	By Mr. Boucher	5
5	By Mr. Reppert	192
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1 P R O C E E D I N G S

2 Whereupon,

3 WILLIAM V. CULVER

4 residing at 141 Parfitt Way Southwest, Winslow, Washington
5 98110, (206) 842-8722, was called as a witness by counsel
6 for Plaintiffs, and having been duly sworn by the Notary
7 Public, was examined and testified as follows:

8 EXAMINATION BY COUNSEL FOR PLAINTIFFS

9 BY MR. BOUCHER:

10 Q. Good morning, Mr. Culver. Could you do me a
11 favor and give me your background and history so far as
12 your work with W. R. Grace is concerned?

13 A. I guess I'd like a more specific answer than that
14 -- or, question. I'm not sure what you want to know.

15 Q. When did you first start with W. R. Grace?

16 A. August of 1966.

17 Q. In what capacity was your first job with them?

18 A. I was the district manager.

19 Q. What was your job duties and responsibilities as
20 a district manager with W. R. Grace in 1966?

21 A. I managed the sales and the business in this
22 district.

1 Q. Were you working with any specific division of
2 W. R. Grace at that point in time?

3 A. I believe it was still -- it was called the
4 Construction Products Division at that time. It may have
5 had a different title, but I believe that's what it was.

6 Q. Okay. And what types of products were you
7 selling in conjunction with the Construction Products
8 Division in 1966?

9 A. Various kinds of vermiculite, polystyrene, and I
10 believe we also had fiberglass.

11 Q. Also selling Mono-Kote at that period in time?

12 A. Yes.

13 Q. What was your strategy, or how did you go about
14 the sale of Mono-Kote in 1966?

15 MR. REPERT: Objection to the form of the
16 question. It's compound and vague.

17 THE WITNESS: I guess I'd like a more specific
18 question.

19 BY MR. BOUCHER: (Resuming)

20 Q. Did you just go out on the street corners and
21 sell Mono-Kote, or is there a way that you, as a trained
22 individual, as the district manager, sold Mono-Kote in

1 1966?

2 MR. REPERT: Objection to the form of the
3 question again. You can go ahead.

4 THE WITNESS: We attempted to get specifications.

5 BY MR. BOUCHER: (Resuming)

6 Q. From whom?

7 A. From architects.

8 Q. How did you go about attempting to get
9 specifications from architects in order to sell Mono-Kote
10 in 1966?

11 A. We attempted to know which buildings were being
12 designed, and then to determine the problems, or they let
13 us know their problems in the design, and we attempted to
14 solve the problems within the scope of what Mono-Kote
15 could solve.

16 Q. What types of problems are you talking about in
17 terms of problems that architects had in the design of
18 buildings?

19 A. The fire rating requirements, and how you solve
20 them.

21 Q. How did you know what architects to talk to?

22 A. That's one of the big issues, is trying to find

1 out who has the buildings that are being designed, from
2 whatever source you can find them.

3 Q. Once you found out who was having buildings that
4 had to be designed, how did you make contact with them in
5 order to attempt to sell Mono-Kote?

6 A. Called them up. Go over and see them.

7 Q. As a district manager is that something that you
8 did, or did you have someone else do it who was
9 responsible for making the phone calls and seeing the
10 architects?

11 MR. REPERT: Object to the form of the question.

12 BY MR. BOUCHER: (Resuming)

13 Q. What type of salespeople did you have underneath
14 you at that point in time who were responsible for aiding
15 in the sale of Mono-Kote?

16 A. Mostly men.

17 Q. Did they have any titles?

18 A. Salesmen.

19 Q. All of them?

20 A. Yes.

21 Q. So in the job category of people underneath you
22 who were responsible for the sale of Mono-Kote were

1 salesmen. Is that correct?

2 A. Would you say that again?

3 Q. The only underneath you who were responsible for
4 the sale of Mono-Kote were salesmen. Is that correct?
5 That is, the name of the category of people.

6 A. The only -- I'm sorry. One more time, please.

7 Q. Well, we'll back it up. What was the structural
8 breakdown of the area that you were responsible for as a
9 district manager in terms of the people underneath you?

10 A. I had salespeople. I had a secretary.

11 Q. A secretary. And how many salespeople did you
12 have?

13 A. At what time?

14 Q. 1966.

15 A. I don't recall.

16 Q. Approximately.

17 A. Approximately six.

18 Q. What area were you responsible for as district
19 manager in 1966?

20 A. Oregon, Washington, Alaska, the panhandle of
21 Idaho, and North and Western Montana.

22 Q. Who did you report to in 1966?

- 1 A. C. H. Wendel.
- 2 Q. What was his job title?
- 3 A. I'm not sure what it was at that time.
- 4 Q. What was his job responsibilities?
- 5 A. I'm sure of the extent of his responsibilities.
- 6 Q. Do you know why you reported to Mr. Wendel in
7 1966?
- 8 A. Because I was directed to.
- 9 Q. And what were you directed to report to Mr.
10 Wendel about?
- 11 A. About the operation of this district.
- 12 Q. Was there a title that was attached to the
13 district, or a name that was given to the district?
- 14 A. Northwest District.
- 15 Q. What aspect of the operation of the Northwest
16 District did you report to Mr. Wendel about at that point
17 in time?
- 18 A. I reported to him the -- everything I thought he
19 should know.
- 20 Q. Did you report to him about people you were going
21 to hire?
- 22 A. If I was going to hire somebody, yes.

1 Q. Did you report to him about people you were going
2 to fire?

3 A. If I was going to fire them, yes.

4 Q. Did you report to him about people you were going
5 to give raises to?

6 A. That was part of my responsibility.

7 Q. Did you report to him about the architects who
8 you had personal contact with about Mono-Kote?

9 A. Generally not specifically.

10 Q. Did you report to him about problems that were
11 occurring in work sites in the use of Mono-Kote?

12 MR. REPERT: Objection. No foundation. There's
13 been no testimony about problems on work sites in the use
14 of Mono-Kote.

15 THE WITNESS: I don't recall that we had
16 problems.

17 BY MR. BOUCHER: (Resuming)

18 Q. You never had a problem with cracking with Mono-
19 Kote?

20 A. Yes, I've had Mono-Kote crack.

21 Q. Is cracking a problem with Mono-Kote?

22 A. Cracking can be a problem.

1 Q. Did you ever report to Mr. Wendel about any
2 problems with cracking of Mono-Kote?

3 A. I don't recall that.

4 Q. You don't recall ever doing that?

5 A. I don't recall that.

6 Q. Is cracking of Mono-Kote the type of thing that
7 Mr. Wendel should know about in his job capacity?

8 MR. REPERT: Objection. Speculation. He
9 already testified he didn't know what Mr. Wendel's job
10 capacity was, other than reporting to him.

11 MR. BOUCHER: You may answer the question, sir.

12 THE WITNESS: Would you restate the question,
13 please?

14 BY MR. BOUCHER: (Resuming)

15 Q. Is the problem in the cracking of Mono-Kote one
16 of the types of things that you were responsible for
17 reporting to Mr. Wendel?

18 A. I don't know that that was something that I was
19 called on to report.

20 Q. When there was cracking in Mono-Kote, who would
21 you report that to?

22 MR. REPERT: Objection.

1 THE WITNESS: I don't recall who I would have
2 reported that to.

3 BY MR. BOUCHER: (Resuming)

4 Q. Would you report it to anyone?

5 MR. REPERT: Objection. Hypothetical question.

6 THE WITNESS: I don't know that I would have
7 reported it to anyone.

8 BY MR. BOUCHER: (Resuming)

9 Q. In 1966 Mono-Kote was an important product that
10 was being sold by W. R. Grace, was it not?

11 A. Mono-Kote was sold by W. R. Grace. That was one
12 of our products.

13 Q. And you considered it to be an important product?

14 A. I think all of our products were important.

15 Q. As far as you knew, W. R. Grace committed a lot
16 of resources to the development of Mono-Kote, did it not?

17 MR. REPERT: If you know.

18 THE WITNESS: I'm not -- I'm not privy to the
19 resources committed to Mono-Kote.

20 BY MR. BOUCHER: (Resuming)

21 Q. As part of your responsibilities as district
22 manager you were also responsible for -- as part of those

1 responsibilities you were responsible for selling Mono-
2 Kote, weren't you?

3 A. I was responsible for that.

4 Q. And that included the advertising and promotion
5 of Mono-Kote, didn't it?

6 A. I don't recall that we advertised it.

7 Q. Did you promote it?

8 A. Yes. I think I said that.

9 Q. Okay. One of the aspects of the promotion of
10 Mono-Kote at that point in time was the quality of the
11 product, was it not?

12 A. Yes.

13 Q. W. R. Grace took great pride in the quality of
14 its Mono-Kote products, didn't it?

15 MR. REPERT: You say "products"? That's plural?
16 That's 1966?

17 MR. BOUCHER: 1966.

18 MR. REPERT: Objection. No foundation that
19 there were "products" called Mono-Kote at that time.

20 BY MR. BOUCHER: (Resuming)

21 Q. You may answer.

22 A. Again, the question?

1 Q. Did W. R. Grace take great pride in its Mono-Kote
2 products?

3 MR. REPERT: Same objection.

4 THE WITNESS: I can't speak for W. R. Grace.

5 BY MR. BOUCHER: (Resuming)

6 Q. But you were a representative of W. R. Grace.

7 A. That's right. Yeah.

8 Q. And you understood, did you not, their
9 promotional strategy with respect to Mono-Kote?

10 A. I promoted Mono-Kote with comfort; yes.

11 Q. And with great pride. Right?

12 A. Oh, I'm not sure if pride is the -- you'd have to
13 define pride.

14 Q. You don't know what pride is?

15 A. In this respect, I guess I'd ask you to define
16 pride.

17 Q. Did you ever have any meetings with anyone at
18 Grace with respect to sales or promotion of Mono-Kote?
19 Anyone above you.

20 A. I had meetings with -- frequently with Mr.
21 Wendel.

22 Q. And in those meetings did he ever talk to you

1 about ways to promote the sale of Mono-Kote?

2 A. I think our marketing strategies were well --
3 often discussed.

4 Q. What were your marketing strategies in 1966 with
5 respect to the sale of Mono-Kote?

6 A. To try to get it specified and get people to buy
7 it.

8 Q. In what way did you use marketing strategies to
9 get Mono-Kote specified, and to get people to use it at
10 that point?

11 A. To persuade them of the value of Mono-Kote.

12 Q. How did you intend to persuade them of the value
13 of Mono-Kote?

14 A. There was information available as to its
15 performance characteristics, and to persuade them that
16 that was the best solution to their problems.

17 Q. What information did you make available
18 concerning its performance characteristics in order to
19 help promote the sale of Mono-Kote?

20 A. Whatever we had at that time, that was available
21 to provide.

22 Q. And what did you have at that point in time that

1 was available to provide them?

2 A. I don't remember specifically.

3 Q. Well, do you remember generally?

4 A. We had literature.

5 Q. What kind of literature?

6 A. Mono-Kote literature.

7 Q. What kind of Mono-Kote literature?

8 A. That that was provided by W. R. Grace.

9 Q. And what was provided by W. R. Grace --

10 A. I don't have it in --

11 Q. -- in the way of Mono-Kote literature?

12 A. I don't recall specifically.

13 Q. Do you recall generally?

14 A. Mono-Kote literature.

15 Q. You don't remember anything about the Mono-Kote
16 literature made available by W. R. Grace at that point in
17 time to promote Mono-Kote?

18 A. Literature that described its properties and
19 values.

20 Q. What properties and values were described in the
21 literature with respect to Mono-Kote?

22 A. I don't recall specifically.

1 Q. Do you recall generally?

2 A. No. That it was good.

3 Q. All right. That it was good for what?

4 A. For fireproofing.

5 Q. It was a high quality fireproofing product? Is
6 that one of them?

7 A. That could be one of them.

8 Q. Do you recall being told by anyone at Grace to
9 promote the strengths of Mono-Kote?

10 A. Define "strengths."

11 Q. I'm asking you, were you ever told by anyone at
12 W. R. Grace to promote the strengths of Mono-Kote?

13 A. I'd like a definition of "strengths."

14 Q. Well, I don't know what anyone at Grace would
15 call the definition of strengths.

16 A. There's all kinds of strength.

17 Q. I understand that. Did anyone ever specifically
18 tell you from W. R. Grace to promote the strengths -- did
19 they say promote the strengths of Mono-Kote?

20 MR. REPERT: He's asked for a definition of what
21 you mean by that.

22 MR. BOUCHER: I don't mean anything other than

1 what they used the term to mean.

2 MR. REPPERT: Well, there's no foundation. Why
3 don't you show him -- if there's a document, maybe you can
4 show it to him and --

5 MR. BOUCHER: I'm asking him did anyone ever tell
6 him to promote the strengths of Mono-Kote.

7 THE WITNESS: Are you asking for the physical
8 strengths? I'm not sure -- I don't --

9 BY MR. BOUCHER: (Resuming)

10 Q. I'm asking, did anyone at Grace ever use that
11 word, those words, or words to that effect, "promote the
12 strengths of Mono-Kote"?

13 MR. REPPERT: In other words, if you have a
14 specific recollection of those words being used.

15 MR. BOUCHER: Yes, those words, or words to that
16 effect. Correct.

17 MR. REPPERT: "The strengths of Mono-Kote."

18 MR. BOUCHER: That's correct.

19 THE WITNESS: Actually, a question of
20 clarification. Do you -- when you mean strengths, to you
21 mean properties? Is that your --

22 MR. BOUCHER: Well, let's go about it this way.

1 BY MR. BOUCHER: (Resuming)

2 Q. Did Mr. Wendel ever tell you, "Bill Culver, would
3 you please start promoting, and make sure that you promote
4 the strengths of Mono-Kote"? Did he ever say those words,
5 or use words to that effect?

6 A. I don't recall that.

7 Q. Did Mr. Egan ever tell you, "Culver, make sure
8 you promote the strengths of Mono-Kote," or words to that
9 effect?

10 A. I don't recall that either.

11 Q. Did Mr. Wendel ever tell you, "Mr. Culver, I want
12 you to make sure that you promote the pluses of Mono-
13 Kote"?

14 A. I don't recall that they used those words.

15 Q. Did Mr. Egan ever tell you, "Mr. Culver, I want
16 you to promote the pluses of Mono-Kote"?

17 A. I don't recall that those words were used.

18 Q. Did they ever ask you, either Mr. Egan or Mr.
19 Wendel, to promote the advantages of Mono-Kote over other
20 types of fireproofing products?

21 A. I think that would have been a direction; yes.

22 Q. What did you understand the advantages of

1 Mono-Kote over other types of fireproofing products to
2 have been in 1966?

3 A. It was hard, durable, and cementitious.

4 Q. Anything else?

5 A. I'm sure there's lots of other adjectives to
6 describe it.

7 Q. Those were the three that you used at that point
8 in time to define the advantages of Mono-Kote over other
9 types of fireproofing products. Is that correct?

10 A. Those were our advantages.

11 Q. Okay. And how did you use these advantages, the
12 fact that Mono-Kote is hard, durable, and cementitious in
13 your marketing strategy to promote the sale of Mono-Kote
14 in 1966?

15 A. As a comparison with the alternative.

16 Q. How do you define marketing strategy, sir?

17 MR. REPERT: It's your word.

18 MR. BOUCHER: No, it's his word. He used it
19 first.

20 BY MR. BOUCHER: (Resuming)

21 Q. How do you define marketing strategy?

22 A. The efforts used to get our products used in

1 preference to others.

2 MESSENGER: [Entering the room] Raymond Boucher?

3 (Brief recess.)

4 BY MR. BOUCHER: (Resuming)

5 Q. I believe I was asking you what efforts you used
6 to get Mono-Kote products used in preference to others.

7 A. Just provide the information on the properties of
8 Mono-Kote, and contrast it with the properties available
9 from competitive products.

10 Q. Did you ever use any trade shows, things of that
11 nature, to help you promote the sale of Mono-Kote in the
12 Northwest region?

13 A. I don't remember any specific show.

14 Q. Did you ever advertise in any regional trade
15 publications in the Northwest district to promote the sale
16 of Mono-Kote?

17 A. I don't remember a specific advertisement.

18 Q. Do you remember a general advertisement?

19 A. No.

20 Q. To the best of you recollection, you never used
21 any regional trade journals to promote the sale of Mono-
22 Kote. Is that correct?

1 A. I don't remember any.

2 Q. Did you think that in 1966 if there were reports
3 to you that Mono-Kote III was cracking on the job, that
4 that was something that was important to report to
5 somebody at W. R. Grace?

6 MR. REPPERT: Object to the form of the question.
7 That type of question.

8 THE WITNESS: I don't recall that I reported
9 cracking.

10 BY MR. BOUCHER: (Resuming)

11 Q. Didn't you think it was important for anyone at
12 W. R. Grace to know that Mono-Kote III was cracking?

13 MR. REPPERT: Objection. There is no testimony
14 that Mono-Kote III was cracking in 1966, and the question
15 is hypothetical. First you must lay a foundation.

16 BY MR. BOUCHER: (Resuming)

17 Q. Will you answer the question?

18 A. Would you ask it again?

19 Q. The question was did you feel it was important to
20 report cracking of Mono-Kote III to anyone at W. R. Grace?

21 A. I don't remember that I reported it.

22 Q. Did you feel it was important to report it?

1 MR. REPPERT: Objection. There's no testimony
2 that there was cracking. It's a hypothetical question.

3 BY MR. BOUCHER: (Resuming)

4 Q. You may answer the question.

5 A. I think that some applicators may have had
6 problems with cracking.

7 Q. Was Mono-Kote III supposed to crack?

8 A. I doubt that it's supposed to crack.

9 Q. In fact you know just the opposite, don't you,
10 that Mono-Kote III was not supposed to crack?

11 A. The end product shouldn't be cracked.

12 Q. If the end product is cracked, what effect does
13 that have, if any, on the fire rating?

14 A. That is beyond my expertise.

15 Q. What did you do when you found situations where
16 Mono-Kote III was cracking?

17 A. I don't recall that I did anything.

18 Q. Do you recall who, if anyone, did?

19 A. The applicator would have done something.

20 Q. What would the applicator have done?

21 A. Patched it.

22 Q. Did you understand that at that period of time

1 that if Mono-Kote III was cracking that one of the causes
2 of the cracking could be that the Mono-Kote mix was
3 improperly mixed?

4 MR. REPPERT: Objection. Hypothetical.

5 THE WITNESS: I don't recall that, that that was
6 the cause of it cracking.

7 BY MR. BOUCHER: (Resuming)

8 Q. Did you have any interaction with applicators as
9 part of your job functions in the Northwest district as to
10 the proper application of Mono-Kote III?

11 A. I tried to; yes.

12 Q. And how did you try to do that?

13 A. To advise them of what we felt the proper
14 application techniques were.

15 Q. Did you go to job sites to help them?

16 A. I was on job sites.

17 Q. Were your salesmen also on job sites?

18 A. That is correct.

19 Q. Was that part of their job responsibilities?

20 A. For some, yes.

21 Q. If you were on job sites -- were you ever on any
22 job sites where the applicators were having problems with

1 cracking of Mono-Kote III?

2 A. Yes.

3 Q. When you were on those job sites where the
4 applicators were having problems with cracking of Mono-
5 Kote III, you didn't do anything with respect to alerting
6 W. R. Grace to the fact that there was a cracking problem
7 on the job site. Is that correct?

8 A. I don't recall a specific alert.

9 Q. Do you recall any general alerts?

10 A. No.

11 Q. Why didn't you report, or alert anyone at W. R.
12 Grace of the cracking problem?

13 MR. REPERT: Objection. That's not what he
14 said.

15 THE WITNESS: I don't think I said I didn't.

16 BY MR. BOUCHER: (Resuming)

17 Q. Well, did you, or didn't you?

18 A. I said I have no specific recollection of doing
19 so.

20 Q. You don't have any general recollection of doing
21 so, either. Is that correct?

22 A. That's correct.

1 Q. Is that something in your responsibilities as a
2 district manager in the Northwest district that you would
3 have been responsible for doing -- and that is, reporting
4 cracking problems with Mono-Kote III to somebody at W. R.
5 Grace?

6 A. Yes.

7 Q. Okay. And why would you -- why wouldn't one of
8 your responsibilities include the reporting of cracking
9 problems in Mono-Kote III to somebody at W. R. Grace?

10 MR. REPERT: If you know.

11 THE WITNESS: My job responsibility would have
12 been to advise them of those kinds of things.

13 BY MR. BOUCHER: (Resuming)

14 Q. Why?

15 MR. REPERT: If you know.

16 THE WITNESS: I think my responsibility was to
17 keep people informed of the operation of the business.

18 BY MR. BOUCHER: (Resuming)

19 Q. How, in your opinion, would cracking problems in
20 Mono-Kote III impact or affect the operation of the
21 business?

22 A. As it was perceived by the applicators.

1 Q. How did you, in your opinion, believe that the
2 perception of the applicators would be affected insofar as
3 Mono-Kote III was concerned with respect to the operation
4 of the business?

5 A. If they had a cracking problem, they needed to
6 patch it, and it would impact them financially.

7 Q. Would it also affect the good will of the
8 applicators, in your opinion?

9 A. Their financial performance would affect the
10 relationships.

11 Q. Did you believe at that point in time that the
12 cracking problems in Mono-Kote III would also affect the
13 perception that applicators had as to the quality of
14 Mono-Kote?

15 A. I don't know. I don't think I can make that
16 connection.

17 Q. Did you believe at that point in time that
18 problems in cracking of Mono-Kote III would have an affect
19 upon applicator -- upon architects with respect to how
20 they viewed Mono-Kote III?

21 MR. REPERT: This is 1966?

22 MR. BOUCHER: That's correct.

1 THE WITNESS: I don't know how -- that would
2 impact them.

3 BY MR. BOUCHER: (Resuming)

4 Q. You had no belief one way or the other at that
5 point in time with respect to architects. Is that
6 correct?

7 MR. REPPERT: No belief of any sort?

8 MR. BOUCHER: With respect to the cracking of
9 Mono-Kote.

10 MR. REPPERT: He said it would impact them.

11 THE WITNESS: No. I don't believe that the
12 cracking, if it was patched, should impact the architect.

13 BY MR. BOUCHER: (Resuming)

14 Q. Who at W. R. Grace would you have informed of any
15 cracking problems in Mono-Kote III?

16 A. I don't know who I would have informed, outside
17 of Mr. Wendel, perhaps.

18 Q. Who were you employed by?

19 A. Vermiculite Northwest.

20 Q. In what capacity?

21 A. When?

22 Q. Well, prior to --

1 A. When?

2 Q. Prior to 1966.

3 A. Several capacities.

4 Q. Give them all to me, please.

5 A. I was a manager, and I became the president of
6 it.

7 Q. Now, that is to --

8 A. More than one -- that's all. Those two
9 capacities.

10 Q. Was Vermiculite Northwest bought out by W. R.
11 Grace?

12 A. That's correct.

13 Q. When did that take place? Do you know? Around
14 1966?

15 A. That's correct.

16 Q. Prior to 1966 did you participate as a member in
17 the Vermiculite Institute?

18 A. No.

19 Q. Prior to 1966 was Vermiculite Northwest a member
20 of the Vermiculite Institute?

21 A. Yes.

22 Q. When did you become a manager of Vermiculite

1 Northwest?

2 A. About 1955.

3 Q. When did you become president of Vermiculite
4 Northwest?

5 A. About '52, I think.

6 Q. Between 1955 and 1962 did you ever attend any
7 Vermiculite Institute meetings on behalf of Vermiculite
8 Northwest?

9 A. I did.

10 Q. When did you first begin attending meetings on
11 behalf of Vermiculite Northwest prior to 1962?

12 A. I believe the first meeting was 1956.

13 Q. When was the Vermiculite Institute founded, if
14 you can recall?

15 A. I do not know.

16 Q. What was the purpose behind Vermiculite
17 Institute?

18 A. To my understanding, it was a trade organization,
19 a trade association.

20 Q. Was ZONOLITE a member of the Vermiculite
21 Institute between 1956 and 1962?

22 A. That's my understanding.

1 Q. Who did Vermiculite Northwest purchase
2 vermiculite from between 1955 to 1962?

3 A. The ZONOLITE Company.

4 Q. Did you understand that the Vermiculite
5 Institute, as part of its capacity, would also be
6 responsible for obtaining fire rating tests on Mono-Kote?

7 A. One of the functions of the Vermiculite Institute
8 was to conduct fire tests.

9 Q. What other functions did the Vermiculite
10 Institute serve?

11 A. They provided all of the trade association
12 coordination, and I -- I'm sure there were a multiple
13 number of things that they did. I don't have all that
14 information.

15 Q. What information do you have about the other
16 functions that they performed in their capacity for
17 providing trade coordination?

18 A. They published some literature?

19 Q. What type of literature?

20 A. On vermiculite.

21 Q. What type of literature on vermiculite did they
22 publish?

1 A. On insulation, on plaster, and on concrete. All
2 the uses of vermiculite.

3 Q. And to whom were these publications directed?

4 A. It could have been to any number of kinds of --
5 I don't know who all -- to whom they were directed.

6 Q. Which ones do you know about?

7 A. I don't recall any specific piece of literature
8 that --

9 Q. Do you recall any groups of individuals or people
10 that the publications were directed towards?

11 A. I believe most of the literature was technical in
12 nature.

13 Q. Was any of their literature promotional in
14 nature?

15 A. I think it was descriptive of the properties of
16 the various products.

17 Q. For promotional purposes?

18 A. Certainly for educational purposes.

19 Q. To educate what group of people or groups of
20 people?

21 A. Employees of the members as well as the
22 specifying people.

1 Q. Meaning people who would be specifying a type of
2 product for purposes of a job site?

3 A. Job site?

4 Q. For building, work sites, those types of things.

5 A. I don't recall that we had any information or --
6 about application, if that's what you're saying.

7 Q. You used the term "educational" for people who
8 were providing specifications. What did you mean by
9 people providing specifications?

10 A. People who wrote specifications.

11 Q. Wrote specifications for what?

12 A. For the various building materials.

13 Q. Wrote specifications for various building
14 materials for what?

15 A. I think I said for insulation, or plaster, for
16 concrete.

17 Q. Wrote specifications for concrete, plaster,
18 insulation, for building materials for what?

19 A. For buildings.

20 Q. Okay. Buildings that were going to be built?

21 A. Pardon?

22 Q. For buildings to be built?

1 A. That's correct.

2 Q. So I understand that any of this educational
3 material that was being sent down to the people who were
4 going to be writing specifications on insulation,
5 concrete, and plastering on buildings that were going to
6 be built was for purposes of promoting the product?

7 A. Promoting the use of vermiculite.

8 Q. While Vermiculite Northwest was a member of the
9 Vermiculite Institute, did you have any understanding
10 whether the Institute was also responsible for collecting
11 medical and scientific data on potential health hazards
12 associated with the use of vermiculite products?

13 MR. REPERT: Objection. There's been no
14 testimony there were any potential health hazards
15 associated with the use of vermiculite products, therefore
16 the question does not have an adequate foundation.

17 BY MR. BOUCHER: (Resuming)

18 Q. You may answer.

19 A. Not that I know of.

20 Q. And you never received any information from the
21 Vermiculite Institute at any point in time while you were
22 connected with Vermiculite Northwest concerning any

1 potential health hazards associated with the use of
2 vermiculite. Is that correct?

3 MR. REPPERT: Objection. Same grounds.

4 THE WITNESS: Not that I'm aware of.

5 BY MR. BOUCHER: (Resuming)

6 Q. What committees were set up in the Vermiculite
7 Institute? Did they have any standing committees?

8 A. When?

9 Q. At any point in time when you were connected with
10 the Vermiculite Institute.

11 A. Yes.

12 Q. What standing committees existed in the
13 Vermiculite Institute?

14 A. Over the period of years there was a concrete
15 committee, and insulation committee, market development
16 committee, I believe. There may have been others I don't
17 recall.

18 Q. Did Vermiculite Northwest sell Mono-Kote products
19 prior to 1966?

20 A. Yes.

21 Q. Did Vermiculite Institute -- when did Vermiculite
22 Northwest first begin selling Mono-Kote products?

1 A. I don't recall.

2 Q. Was Vermiculite Northwest selling Mono-Kote
3 products in 1956 when you were working for Vermiculite
4 Northwest?

5 A. No.

6 Q. Did Vermiculite Northwest ever sell Mono-Kote 1?

7 A. Yes.

8 Q. Did Vermiculite Northwest ever sell Mono-Kote
9 III?

10 A. Yes.

11 Q. Did Vermiculite Northwest ever sell Mono-Kote 2?

12 A. No.

13 Q. Do you have a recollection of approximately when
14 Mono-Kote III was first developed?

15 A. In '60, give or take -- approximately 1960.

16 Q. Do you have a recollection of who developed
17 Mono-Kote III?

18 A. Yes.

19 Q. Who?

20 A. Mel Quayle.

21 THE REPORTER: What was the name again?

22 THE WITNESS: Quayle. Mel Quayle.

1 THE REPORTER: Mel Quayle.

2 BY MR. BOUCHER: (Resuming)

3 Q. No relation.

4 Do you want to spell that?

5 A. Q-u-a-y-l-e.

6 Q. To Dan, that was.

7 Who was Mel Quayle affiliated with when Mono-Kote
8 III was developed?

9 A. Gypsum Company in Albuquerque.

10 Q. Was Mono-Kote III developed for use by the
11 Vermiculite Institute members?

12 A. Yes.

13 Q. Which standing committees were responsible for
14 Mono-Kote III with respect to the development or sale of
15 Mono-Kote III?

16 MR. REPERT: Standing committees of the
17 Vermiculite Institute?

18 MR. BOUCHER: Correct.

19 THE WITNESS: None of them.

20 BY MR. BOUCHER: (Resuming)

21 Q. Pardon?

22 A. None of them.

1 Q. So there weren't any standing committees that
2 were responsible for Mono-Kote III, sale and promotion.

3 A. That's correct.

4 Q. Which --

5 MR. BOUCHER: Do you want to talk for a second?

6 MR. REPERT: Just briefly.

7 (Brief recess.)

8 MR. REPERT: Do you want to clarify anything
9 concerning the Vermiculite Institute and Mono-Kote?

10 THE WITNESS: Mono-Kote was a trademark of the
11 ZONOLITE and its licensees. And the Vermiculite Institute
12 dealt with Type MK, not with Mono-Kote.

13 BY MR. BOUCHER: (Resuming)

14 Q. What does MK stand for?

15 A. Type MK is a fire proofing. Two letters.

16 Q. Was Vermiculite Northwest a licensee of ZONOLITE?

17 A. That's correct.

18 Q. Were there any Vermiculite Institute members that
19 were not licensees of ZONOLITE other than ZONOLITE itself?

20 A. There may have been; yes.

21 Q. Do any come to mind?

22 A. No.

1 Q. With respect to obtaining the UL fire rating on
2 the Type MK, was that something that the Vermiculite
3 Institute was responsible for doing?

4 A. The Vermiculite Institute conducted the fire
5 tests.

6 Q. On behalf of all its members?

7 A. I don't know that all members participated in
8 that.

9 Q. On behalf of its members?

10 A. On behalf of some of its members.

11 Q. Was there a standing committee that was
12 responsible for having the MK fire test studies conducted?

13 A. The plaster and/or fireproofing committee would
14 have been involved in the need of the fire test.

15 Q. Was the plaster and fireproofing committee a
16 separate committee from the concrete, comma, insulation,
17 or marketing development committees?

18 A. I think it was.

19 Q. When did the Vermiculite Institute cease to
20 exist?

21 A. I don't recall.

22 Q. Do you recall approximately?

1 A. About 1968, I believe.

2 Q. Do you recall why?

3 A. No.

4 Q. Did you ever serve on any of the s'tanding
5 committees in the Vermiculite Institute?

6 A. Yes.

7 Q. What committees did you sit as a member of?

8 A. I was on the fireproofing committee, and the
9 market development committee. I may have been on some
10 others, but I don't recall.

11 Q. What was the function of the fireproofing
12 committee?

13 A. To attempt to understand the needs of the
14 marketplace.

15 Q. Is that it?

16 A. That was certainly one of them.

17 Q. What other functions did it serve?

18 A. To try to formulate responses to those needs.

19 Q. Responses by way of fire ratings?

20 A. That's one.

21 Q. What other types of responses?

22 A. I think that's substantially it.

1 Q. What was the function of the market development
2 committee?

3 A. To try to explore all possible uses for
4 vermiculite.

5 Q. Anything else?

6 A. I don't recall.

7 Q. Was one of its functions to promote the sale of
8 vermiculite products?

9 A. I think any time they -- the Vermiculite
10 Institute did not get involved in the sale of products.
11 It was the member companies that did the selling.

12 Q. So there was no coordinated promotional efforts
13 that were conducted through the Vermiculite Institute with
14 respect to the sale of Mono-Kote -- of vermiculite-
15 containing products?

16 A. I don't recall that they were involved in
17 coordinated sales efforts; no.

18 Q. They weren't involved in any coordinated
19 promotional efforts?

20 A. I don't recall them.

21 Q. Do you have any understanding as to why MK-3 was
22 developed?

1 A. As an improvement -- as an MK-1. And 2, if there
2 was an MK-2.

3 Q. MK-2, wasn't that an insulation product?

4 A. I have no knowledge about MK-2.

5 Q. You don't ever recall there being an MK-2 which
6 was a fireproofing product?

7 A. I don't ever recall any specifics on MK-2.

8 Q. In what way was MK-3 developed as an improvement
9 on MK-1?

10 A. I think primarily an economic improvement.

11 Q. In what way?

12 A. Less costly.

13 Q. How was it less costly?

14 A. It used a different gypsum.

15 Q. When MK-3 was first developed and put on the
16 market, did it perform as well as MK-1 had performed prior
17 to that point in time?

18 A. I can't compare them.

19 Q. You don't recall that when MK-3 was first placed
20 on the market, you had some problems with MK-3 with
21 respect to its performance in relationship with MK-1?

22 A. I don't recall that.

1 Q. It didn't apply as well as MK-1 had applied
2 previously.

3 MR. REPPERT: Is that a question?

4 THE WITNESS: I don't recall.

5 BY MR. BOUCHER: (Resuming)

6 Q. Did your job functions with W. R. Grace change at
7 all between 1966, when you became a district manager, to
8 1973?

9 A. Yes.

10 Q. What changes took place?

11 A. I no longer had any manufacturing responsibility.

12 Q. In 1966 when you were a district manager of W. R.
13 Grace, did you have any manufacturing responsibility?

14 A. The manufacturing managers reported to me.

15 Q. Which manufacturing managers reported to you?

16 A. The ones in Portland, and in Spokane.

17 Q. What was being manufactured at Portland when the
18 manufacturing managers reported to you?

19 A. All of our vermiculite products.

20 Q. Including Mono-Kote III?

21 A. Yes.

22 Q. And what products were being manufactured at

1 Spokane when you were marketing manager -- or, when the
2 marketing managers reported to you?

3 A. That was production managers, not marketing.

4 Q. I'll start over again. What products were being
5 manufactured in Spokane when the manufacturing managers
6 reported to you?

7 A. All of the vermiculite products.

8 Q. Including MK-3, or Mono-Kote III?

9 A. That is correct.

10 Q. When did the manufacturing managers in Portland
11 and Spokane stop reporting to you?

12 A. I don't recall.

13 Q. Was it prior to 1970? Do you recall?

14 A. I think it's probably in that range. I don't
15 recall.

16 Q. Do you recall whether W. R. Grace had begun to
17 develop Mono-Kote IV prior to, or after the time that the
18 manufacturing managers in Portland and Spokane stopped
19 reporting to you?

20 A. I don't know.

21 Q. Did your job duties change in any other way
22 between 1966 and 1973?

1 A. Not that I'm aware of.

2 Q. With respect to the reporting by manufacturing
3 managers from Portland and Spokane to you, who were they
4 responsible for reporting to?

5 A. I don't understand your question.

6 Q. They reported to you. In what way did they
7 report to you?

8 MR. REPERT: You mean the manufacturing
9 managers?

10 MR. BOUCHER: Right.

11 THE WITNESS: As to the conduct of the business.

12 BY MR. BOUCHER: (Resuming)

13 Q. So you were ultimately responsible for the
14 conduct of the manufacturing at the Spokane and Portland
15 facilities at that point in time?

16 A. If they reported to me, I guess was.

17 Q. After 1973, in what way, if at all, did your job
18 responsibilities at W. R. Grace change?

19 A. None.

20 Q. Are you still working with W. R. Grace?

21 A. Yes.

22 Q. And your position with W. R. Grace is still as

1 the district manager in the Northwest district?

2 A. That is correct.

3 Q. Do you still report to Mr. Wendel?

4 A. No.

5 Q. To whom do you report?

6 A. Mr. Feit.

7 Q. To Tom Feit?

8 A. Yes.

9 Q. Is he out of Los Angeles?

10 A. No.

11 Q. Where is he out of?

12 A. Santa Anna.

13 Q. When did you begin reporting to Mr. Feit?

14 A. About 1975.

15 Q. Did the number of sales people that you had
16 underneath you between 1966 and 1973 change?

17 A. I don't recall.

18 Q. So, in 1973, you don't recall whether or not you
19 had more than six salespeople working for you?

20 A. No. I don't recall the numbers of salespeople at
21 any specific time.

22 Q. Did you ever hear that asbestos was potentially

1 harmful to human health?

2 A. Yes.

3 Q. When did you first hear that asbestos was of
4 potential health effect to individuals?

5 A. I don't know.

6 Q. Do you recall whether you'd heard asbestos was a
7 potential -- or had potential human health effects prior
8 to 1966?

9 A. I don't know when I first heard it.

10 Q. Do you recall what circumstances surround the --
11 let me rephrase that.

12 Do you recall under what circumstances you first
13 learned that asbestos was a potential -- had potential
14 adverse health effects on people?

15 A. Would you say that again -- the question again?

16 Q. Do you recall what circumstances surrounded your
17 understanding that asbestos caused potential adverse
18 health effects?

19 A. No, I don't recall.

20 Q. Do you recall who you learned that asbestos
21 caused potential adverse health effects upon people from?

22 A. No, I don't recall that.

1 Q. Did you ever hear that a quote -- a 1968 NEW
2 YORKER magazine published an article concerning the health
3 effects associated with exposure to asbestos?

4 A. I'm aware there was a NEW YORKER article on it.
5 The dates I'm not -- I don't recall.

6 Q. Did you ever receive a copy of the NEW YORKER
7 article published -- which discussed the adverse health
8 effects on people who were exposed to asbestos?

9 A. I had a copy of it.

10 Q. Do you recall how you received a copy of the
11 article out of the NEW YORKER which discussed the adverse
12 health effects associated with exposure to asbestos?

13 A. No, I don't.

14 Q. Do you recall whether you received a copy of the
15 NEW YORKER article which discussed the adverse health
16 effects associated with exposure to asbestos at or about
17 the time that you first learned that exposure to asbestos
18 caused adverse health effects?

19 MR. REPERT: That's -- your prior wasn't the way
20 you rephrased it. You were talking to him about the
21 potential adverse health effects in the prior question, so
22 that there's no foundation in the way you phrased the

1 question.

2 BY MR. BOUCHER: (Resuming)

3 Q. You may answer.

4 A. I don't know I first heard about asbestos as a
5 potential health hazard.

6 Q. Do you recall receiving a copy of the NEW YORKER
7 article that discussed the potential adverse health
8 effects associated with exposure to asbestos at or about
9 the time that the article was published?

10 A. I don't recall when I received the article.

11 Q. What adverse health effects did you hear were
12 associated with exposure to asbestos?

13 A. When?

14 Q. When you first learned.

15 A. I don't recall what the first health hazard I
16 heard was.

17 Q. As you sit here today, what do you understand to
18 be the adverse health effects associated with exposure to
19 asbestos?

20 MR. REPERT: If you have any such understanding.
21 Let me remind you, as you I'm sure are aware, we're not
22 offering this gentleman as an expert witness on those

1 subjects.

2 MR. BOUCHER: I understand.

3 THE WITNESS: I understand that the inhalation of
4 asbestos causes asbestosis.

5 BY MR. BOUCHER: (Resuming)

6 Q. Anything else?

7 A. And I guess it can cause cancer.

8 Q. Anything else?

9 A. Not that I know of.

10 Q. What types of cancer have you heard the
11 inhalation of asbestos can cause?

12 A. Mesothelioma.

13 Q. Any others?

14 A. Not that I'm aware of.

15 Q. Have you ever heard that exposure to or
16 inhalation of asbestos fibers is a cause of lung cancer?

17 A. I guess that's another one. Could be.

18 Q. At the time that you first heard that the
19 inhalation of asbestos is a potential cause of cancer, was
20 Mono-Kote III being produced by W. R. Grace with asbestos?

21 A. I would have been at that -- during that time;
22 yes.

1 Q. When you first learned that inhalation of
2 asbestos was a potential cause of cancer and asbestosis,
3 did you have any discussions with anyone at that time
4 about the potential health hazards associated with
5 exposure to Mono-Kote III?

6 MR. REPERT: Objection. There's been no
7 testimony that there are potential health hazards
8 associated with Mono-Kote III. The question hasn't any
9 foundation.

10 THE WITNESS: I don't recall any conversation of
11 that kind.

12 BY MR. BOUCHER: (Resuming)

13 Q. Do you recall having any conversations at any
14 point in time with anyone from W. R. Grace concerning the
15 potential health hazards associated with exposure to
16 Mono-Kote III?

17 MR. REPERT: Objection. Same grounds. There's
18 been no testimony there are any potential health hazards
19 associated with Mono-Kote III. The question has no
20 foundation.

21 BY MR. BOUCHER: (Resuming)

22 Q. You may answer.

1 A. I don't recall any.

2 Q. Did you ever receive any correspondence from
3 anyone at W. R. Grace which indicated in any way that
4 there was a potential health hazard associated with Mono-
5 Kote III as a result of the asbestos content?

6 A. I don't recall any.

7 Q. Did you ever have any conversations with anyone
8 at W. R. Grace concerning the need to develop a substitute
9 for Mono-Kote III as a result of the fact that Mono-Kote
10 III contained asbestos?

11 A. Yes.

12 Q. Did you ever receive any correspondence from
13 anyone at W. R. Grace with respect to the need to develop
14 a substitute for Mono-Kote III as a result of the fact
15 that Mono-Kote III contained asbestos?

16 A. I don't have recollection of specific
17 correspondence of that kind.

18 Q. Do you have a general recollection of receiving
19 correspondence of that kind?

20 A. I don't have recollection of those -- any things
21 --

22 Q. Who at W. R. Grace did you have discussions with

1 concerning the need to develop a substitute for Mono-Kote
2 III as a result of the fact that Mono-Kote III contained
3 asbestos?

4 MR. REPERT: Question back, please.

5 THE REPORTER: "Question: Who at W. R. Grace did
6 you have discussions with concerning the need to develop a
7 substitute for Mono-Kote III as a result of the fact that
8 Mono-Kote III contained asbestos?"

9 THE WITNESS: I don't recall who those would have
10 been.

11 BY MR. BOUCHER: (Resuming)

12 Q. Do you recall anyone?

13 A. Not specifically, no.

14 Q. Was Mr. Wendel one of the people that you would
15 have had those conversations with?

16 MR. REPERT: Objection. He's testified he
17 doesn't have any recollection. It's asked and answered.

18 BY MR. BOUCHER: (Resuming)

19 Q. Could you respond?

20 A. I would expect my duties would have required me
21 to talk to him about it.

22 Q. What about Tom Egan? Is he one of the

1 individuals that you would have had conversations with
2 about the need to develop a substitute for Mono-Kote III?

3 A. Tom Egan was also in the system, and might have
4 been one of those.

5 Q. Do you recall when you first had any
6 conversations, or approximately what year you first had
7 any conversations with anyone from W. R. Grace concerning
8 the need to develop a substitute for Mono-Kote III as a
9 result of the fact that Mono-Kote III contained asbestos?

10 A. No, I don't.

11 Q. Do you recall whether or not conversations that
12 you had with people at W. R. Grace concerning the need to
13 develop a substitute for Mono-Kote III as a result of the
14 fact that Mono-Kote III contained asbestos occurred prior
15 to 1970?

16 A. No, I don't.

17 Q. What was your understanding as to the reason why
18 there was a need to develop a substitute for Mono-Kote III
19 as a result of the fact that it contained asbestos?

20 MR. REPPERT: Objection. He hasn't testified
21 that there was need. He testified that there were
22 conversations about whether there was a need. That's all.

1 THE WITNESS: Would you repeat the question,
2 please?

3 BY MR. BOUCHER: (Resuming)

4 Q. What was your understanding as to why there was a
5 need to develop a substitute for Mono-Kote III?

6 MR. REPPERT: Objection. Same grounds just
7 stated.

8 THE WITNESS: When?

9 MR. BOUCHER: Initially.

10 MR. REPPERT: Objection. Vague.

11 (Pause.)

12 THE WITNESS: My understanding of the need was to
13 develop another product where you can get it by the
14 regulatory agencies.

15 BY MR. BOUCHER: (Resuming)

16 Q. Isn't it true that when you first learned that
17 there was a need to develop a substitute for Mono-Kote
18 III, the need was the result of the fact that somebody
19 from Grace had participate in a conference where Dr.
20 Silikoff explained the health hazards associated with
21 exposure to asbestos?

22 A. I don't recall that.

1 Q. Have you ever heard of the name Dr. Irving
2 Silikoff?

3 A. I have.

4 Q. When did you first hear the name Silikoff?

5 A. In the NEW YORKER article.

6 Q. Now, isn't it true that when you first heard of
7 the need to develop a substitute for Mono-Kote III, one of
8 the reasons given for the need to develop the substitute
9 was that there was heat in the marketplace with respect to
10 fireproofing products containing asbestos?

11 A. Maybe you can explain that question a little bit
12 better. I don't really understand it.

13 Q. Isn't it true that when you first heard there was
14 need to develop a substitute for Mono-Kote III, that one
15 of the reasons given was that there was concern within the
16 marketplace of the health hazards associated with exposure
17 to fireproofing products that contained asbestos?

18 A. The biggest concern was regarding the kind of
19 fireproofing that was referred to in the NEW YORKER
20 article.

21 Q. As to my question, isn't it true that when you
22 first heard of the need to develop a substitute for

1 Mono-Kote III, one of the reasons given for that need was
2 the fact that there was concern in the marketplace about
3 the potential health hazards associated with asbestos-
4 containing fireproofing products?

5 MR. REPPERT: Objection. Asked and answered.

6 THE WITNESS: I'm sure that the need for the
7 development of another product was driven by the
8 regulatory agencies.

9 MR. BOUCHER: Move to strike as nonresponsive.

10 BY MR. BOUCHER: (Resuming)

11 Q. Let me ask you again, was one of the reasons
12 explained to you by individuals from W. R. Grace
13 concerning the need to develop an alternative to, or a
14 substitute for, Mono-Kote III the fact that there was a
15 concern in the marketplace about the health hazards
16 associated with fireproofing products that contain
17 asbestos? Was that one of the things that they told you?

18 MR. REPPERT: Objection. Asked and answered.

19 THE WITNESS: The concern was with the other kind
20 of material.

21 BY MR. BOUCHER: (Resuming)

22 Q. So no one at Grace told ever told you that one of

1 the reasons for the need to develop a substitute for Mono-
2 Kote 3 was the fact that there was a concern in the
3 marketplace with respect to the health hazards associated
4 with fireproofing material that contain asbestos. Is that
5 correct?

6 A. There was a concern regarding the hazards of the
7 other kind of fireproofing.

8 MR. BOUCHER: That wasn't my question. Move to
9 strike as nonresponsive.

10 BY MR. BOUCHER: (Resuming)

11 Q. Is it true, then, that no one at Grace ever told
12 you that one of the reasons for the need to develop a
13 substitute for Mono-Kote III was the concern in the
14 marketplace about fireproofing products that contain
15 asbestos?

16 MR. REPERT: Objection. You've asked that about
17 three times. He's answered every time you've asked it.
18 He's identified what the concern was, and about what kind
19 of product. And I find it -- that you're starting to get
20 unnecessarily repetitive. I ask you to drop it and move
21 on to something else.

22 MR. BOUCHER: I have a right to an answer to my

1 question of Mr. Culver.

2 MR. REPPERT: He's answered your question three
3 times --

4 MR. BOUCHER: And you have not --

5 MR. REPPERT: -- and the record's going to show
6 that.

7 MR. BOUCHER: Well, the record will show what it
8 shows.

9 BY MR. BOUCHER: (Resuming)

10 Q. You have not answered my question yet. It's a
11 very simple question that calls for a yes or no answer.
12 Either somebody from Grace did, or somebody --

13 MR. REPPERT: I'm sorry, the question --

14 MR. BOUCHER: May I finish, please?

15 MR. REPPERT: You may.

16 MR. BOUCHER: Thank you.

17 BY MR. BOUCHER: (Resuming)

18 Q. Either somebody from Grace did, or somebody from
19 Grace did not explain that one of the reasons for
20 developing a substitute to Mono-Kote III was the fact that
21 there was a concern in the marketplace for fireproofing
22 products that contain asbestos. That is either a fact, or

1 it is not a fact, or you don't recall.

2 A. My understanding for the development of a
3 replacement for Mono-Kote III is that it was required
4 because of the concern for asbestos as contained in other
5 products.

6 Q. It was required to develop a substitute for
7 Mono-Kote III because of the concern about asbestos
8 contained in other products.

9 A. Because of the nature of the other products, and
10 the method of application. Asbestos was sprayed into the
11 air, and contaminated lots of nearby area. And that was
12 the basis for the concern about the other products.

13 Q. And in what way did the concern about the other
14 products impact upon the need to develop an alternative or
15 substitute for Mono-Kote III?

16 A. My understanding is that the regulatory agencies
17 perceived the spraying of that kind of asbestos required
18 regulation. And when I speak of "that" product, I'm
19 talking about the other kind.

20 Q. So it was your understanding that regulatory
21 agencies did not perceive the need to regulate the
22 spraying of asbestos-containing Mono-Kote. Is that

1 correct?

2 A. When?

3 Q. Well, you just said that regulatory agencies
4 perceived the spraying of that kind of asbestos required
5 regulation. So my question is, then: it's your
6 understanding the regulatory agencies did not perceive the
7 need to regulate the spraying of Mono-Kote III.

8 MR. REPERT: What's your question?

9 BY MR. BOUCHER: (Resuming)

10 Q. Is that correct?

11 A. I'm not familiar with any regulatory agencies
12 requiring -- concerned about the spraying of asbestos --
13 or, MK-3, prior to '73.

14 Q. So you're not familiar with any regulatory
15 agencies of any kind that were concerned about regulating
16 the spraying of Mono-Kote III prior to 1973. Is that
17 correct?

18 A. I have no knowledge of any.

19 Q. Is it your understanding that the marketplace was
20 concerned about asbestos contained in other types of
21 fireproofing products?

22 MR. REPERT: "Other" being other than Mono-Kote?

1 MR. BOUCHER: Other than Mono-Kote.

2 THE WITNESS: I have no specific knowledge of
3 them, either. Regulatory agencies.

4 BY MR. BOUCHER: (Resuming)

5 Q. So let me see if I understand your testimony
6 correctly. There was no concern, so far as you were aware
7 of, in the marketplace, about the use of asbestos-
8 containing fireproofing products prior to 1973. Is that
9 correct?

10 A. I don't think I said that. I have no knowledge
11 of regulatory agencies regarding the other products.

12 Q. I'm not talking about regulatory agencies.

13 A. Yeah. That's what I think we were talking about.

14 Q. But right now, my question is the marketplace.
15 Okay?

16 A. Okay.

17 Q. Speaking specifically about concern in the
18 marketplace. Prior to 1973, were you ever aware of a
19 concern in the marketplace about the use of asbestos-
20 containing fireproofing products?

21 A. I was aware about concern in the marketplace for
22 the other kind; yes.

1 Q. And what was your understanding of the concern in
2 the marketplace for the other kind of asbestos-containing
3 fireproofing products, prior to 1973?

4 A. I think I said that the method of application
5 allowed for a lot of asbestos to be liberated into the
6 air.

7 Q. And why, to your understanding, was there a
8 concern in the marketplace about asbestos being liberated
9 in the air from the use of the other kinds of asbestos-
10 containing fireproofing products?

11 A. As in that NEW YORKER article, it was concerned
12 about asbestos being free in the air.

13 Q. And the effects that asbestos being free in the
14 air might have upon the health of people?

15 A. That's my perception now.

16 Q. Did you understand there to be a concern in the
17 marketplace about the use of Mono-Kote III, which
18 contained asbestos prior to 1973?

19 A. I'm not aware of any concern.

20 Q. Is it your understanding that the marketplace
21 understood the distinction between Mono-Kote III and the
22 other types of sprayed-on asbestos-containing fireproofing

1 products?

2 A. I believe that was generally understood.

3 Q. Okay. And so it's your belief that the
4 marketplace understood that there was not a -- let me
5 rephrase that.

6 Is it your testimony, then, that you believe that
7 the marketplace didn't perceive there to be a health
8 hazard associated with exposure to Mono-Kote III?

9 A. I believe the marketplace perceived the
10 difference between Mono-Kote III and any other kind.

11 Q. Did you believe that they perceived a difference
12 in the potential health risk associated with exposure to
13 Mono-Kote III as opposed to the other kinds?

14 MR. REPERT: Objection. There's been no
15 testimony there's any potential health associated with
16 Mono-Kote III, therefore you're asking him to make a
17 comparison based on facts to which this witness has not
18 previously testified.

19 BY MR. BOUCHER: (Resuming)

20 Q. You can answer the question.

21 A. I'm not aware of any concern regarding health
22 risk at all of Mono-Kote III.

1 Q. So then it's your understanding that the
2 marketplace made a distinction between Mono-Kote III and
3 the other types of spray-on asbestos-containing
4 fireproofing products with respect to potential health
5 risks. Is that correct?

6 A. I believe the marketplace recognized the
7 difference between the products.

8 Q. With respect to health risks?

9 MR. REPPERT: Objection. There's been no
10 testimony that -- you're asking him to compare health
11 risks. There's no testimony that the Mono-Kote product
12 had any health risks.

13 BY MR. BOUCHER: (Resuming)

14 Q. Answer the question.

15 A. Can I have the question again?

16 Q. You indicated that you understood -- that you
17 believed that the marketplace understood the distinction
18 between Mono-Kote III and the other types of asbestos-
19 containing fireproofing products, and so my follow-up
20 question to you was: did they understand that distinction
21 with respect to potential health risks associated with
22 exposure to either product?

1 A. I don't know whether --

2 MR. REPPERT: Same objection. Go ahead.

3 THE WITNESS: I don't know what their
4 understanding of the exposure was -- or, risk.

5 BY MR. BOUCHER: (Resuming)

6 Q. All right. Let me go back to one of my original
7 questions I've still not received an answer to, and that
8 is: during any of the discussion which you had with
9 anyone from W. R. Grace, is it true, then, that no one
10 from Grace ever said to you, "One of the reasons why we
11 need to develop a substitute for Mono-Kote III is because
12 there is a concern in the marketplace over asbestos-
13 containing fireproofing products?"

14 MR. REPPERT: Objection. Asked and answered.
15 About ten times.

16 THE WITNESS: I think there was a concern for any
17 of the -- the other kind.

18 BY MR. BOUCHER: (Resuming)

19 Q. And the effect that the concern on the other kind
20 would have upon Mono-Kote III in the marketplace?

21 A. No, regarding the impact on the other products.

22 Q. Well, how does that relate to Mono-Kote III, sir?

1 A. I don't think I said that.

2 Q. Well, my question was about Mono-Kote III. It
3 wasn't about the other kind of products.

4 A. I don't -- okay. Would you ask the question
5 again?

6 Q. Okay. I think it just asks for a yes or no, or a
7 "I don't know" type of response.

8 A. One more time. Ask me the question.

9 Q. Did anyone from W. R. Grace ever say to you,
10 "One of the reasons why we need to formulate a substitute
11 for Mono-Kote III is that there's a concern in the
12 marketplace about the use of fireproofing products that
13 contain asbestos"?

14 A. There was a concern in the marketplace regarding
15 the asbestos in other products. And I, as I testified
16 earlier, think that the concern regarding asbestos was
17 being driven by regulatory agencies.

18 MR. BOUCHER: Okay. That's not my question. I
19 move to strike as nonresponsive.

20 MR. REPERT: He's already answered this question
21 about eight times. I'm just not going to let you do it
22 one more time. I'm sorry. You've had enough.

1 MR. BOUCHER: I move to strike as nonresponsive.
2 My question calls for a yes or no answer, sir.

3 MR. REPPERT: I'm sorry. He's answered this
4 question at least six times the same way. You've asked it
5 the same way. His answer stands on the record. Your
6 question stands on the record. I am going to ask you to
7 move on to other subject matters and don't waste the rest
8 of the day.

9 MR. BOUCHER: Well, I'll only waste the rest of
10 the day if I don't get a response to my questions.

11 BY MR. BOUCHER: (Resuming)

12 Q. Did anyone, yes or no --

13 MR. REPPERT: If you ask him the same question,
14 you might as well forget it, because I'm going to instruct
15 him not to answer.

16 MR. BOUCHER: You can instruct him --

17 MR. REPPERT: He's had adequate -- you've had --
18 you've asked the question --

19 MR. BOUCHER: And he's never responded to it.

20 MR. REPPERT: He has responded to the question.

21 MR. BOUCHER: He's never responded to my
22 question. It's a very simple question. Either somebody

1 says something at Grace, or they don't say something at
2 Grace.

3 MR HENDERSON: Well, on every question, it isn't
4 a yes or no answer.

5 BY MR. BOUCHER: (Resuming)

6 Q. Did somebody at Grace ever say to you that one of
7 the reasons for the need to reformulate Mono-Kote III was
8 the fact that there was a perception in the marketplace --
9 a negative perception in the marketplace about asbestos-
10 containing fireproofing products?

11 MR. REPERT: I'll let you answer that question
12 one more time, but that's the last time I'll let you
13 answer the question.

14 THE WITNESS: There was a concern in the
15 marketplace regarding sprayed mineral fiber and sprayed
16 asbestos of the other kind.

17 BY MR. BOUCHER: (Resuming)

18 Q. Did anyone at Grace ever say that that concern in
19 the marketplace was one of the reasons why there was a
20 need to reformulate Mono-Kote III?

21 A. No. The marketplace didn't direct the
22 reformulation of Mono-Kote III -- or, the change.

1 Q. That's all I needed to know. You've answered the
2 question.

3 Did anyone at W. R. Grace ever tell you that one
4 of the reasons for the need to reformulate Mono-Kote III
5 was that there was a health hazard associated with
6 exposure asbestos-containing Mono-Kote III?

7 A. No.

8 Q. Did you have any discussions with a Mr. Bragg,
9 who was employed by Grace, with respect to the
10 reformulation of Mono-Kote III?

11 A. I don't recall any.

12 Q. Did you have any discussions with Mr. Vining with
13 respect to the reformulation of Mono-Kote III?

14 A. I don't recall any.

15 Q. Did you ever have any discussions with Mr.
16 Pickthall with respect to the reformulation of Mono-Kote
17 III?

18 A. I don't recall any.

19 Q. Do you recall when -- let me rephrase that.

20 Was there a Mono-Kote V that was developed at
21 some point in time?

22 A. Yes.

1 Q. When was Mono-Kote V developed, to the best of
2 your recollection?

3 MR. REPPERT: If you know.

4 THE WITNESS: I don't know.

5 BY MR. BOUCHER: (Resuming)

6 Q. Was Mono-Kote V developed prior to the regulatory
7 agency involvement in the regulation of sprayed-on
8 asbestos fireproofing products?

9 MR. REPPERT: Objection. He's just testified he
10 doesn't know when it was developed.

11 BY MR. BOUCHER: (Resuming)

12 Q. You can answer my question.

13 A. What was the date of the -- that you're referring
14 to?

15 Q. The date doesn't really matter, sir. It's just
16 -- do you recall whether or not Mono-Kote V was developed
17 prior to the time, whenever it was, that there was
18 regulations that precluded the use of Mono-Kote III?

19 A. I don't recall when Mono-Kote V was developed.

20 Q. So you don't recall whether or not it occurred
21 before or after the regulation of Mono-Kote III.

22 A. I do not recall.

1 Q. Do you recall whether MK-4 was developed before
2 the regulation of Mono-Kote III?

3 MR. REPPERT: Before the regulation of Mono-Kote
4 III?

5 MR. BOUCHER: Correct.

6 THE WITNESS: It was developed before Mono-Kote
7 III was precluded.

8 BY MR. BOUCHER: (Resuming)

9 Q. How soon prior to the time that Mono-Kote III was
10 precluded from being used in the marketplace was Mono-Kote
11 IV developed?

12 A. I don't know.

13 Q. Was it a matter of months?

14 A. I don't know.

15 Q. Was it more than a year?

16 A. I don't know that.

17 Q. Do you recall whether or not you were selling
18 Mono-Kote III prior to the time that Mono-Kote -- strike
19 that.

20 Do you recall whether or not you were selling
21 Mono-Kote IV prior to the time that Mono-Kote III was
22 precluded by the regulatory agencies?

1 A. Yes.

2 Q. And were you selling it prior to that time?

3 A. Yes.

4 Q. Did you ever gain an understanding as to how long
5 you'd be given, once the regulatory agencies adopted
6 regulations which precluded the use of Mono-Kote III, how
7 much time you'd be given to sell off existing inventories
8 of Mono-Kote III?

9 MR. REPPERT: Objection. There's no foundation
10 there were existing inventories of Mono-Kote III. The
11 question presumes a fact not in evidence.

12 BY MR. BOUCHER: (Resuming)

13 Q. You may answer the question.

14 A. Isn't it true that your understanding, prior to
15 the adoption of regulations which precluded the use of
16 Mono-Kote III, was that you'd be given ninety days after
17 the adoption of the regulation to continue to sell Mono-
18 Kote III?

19 A. I don't recall that.

20 Q. Isn't it true that it was your understanding from
21 Grace that you were to make sure that inventories were
22 kept high with respect to Mono-Kote III prior to the time

1 that the regulatory agencies precluded the sale of Mono-
2 Kote III, so that there would be a substantial amount of
3 Mono-Kote III in existence at the time of the regulation?

4 A. I'm not aware of that.

5 Q. Did you ever hear anything from anybody at W. R.
6 Grace with respect to the obtaining of a waiver from the
7 regulatory agencies to permit the continued use of Mono-
8 Kote III for a period of time, to use up either existing
9 inventories or to finish jobs that were in existence at
10 the time of the regulation of Mono-Kote III?

11 A. I'm not aware of any appeals.

12 Q. Prior to 1973 didn't you participate in lobbying
13 efforts in the State of Oregon to attempt to get the
14 legislature to exempt Mono-Kote III from fireproofing
15 regulations with respect to asbestos-containing products?

16 A. I don't recall that effort.

17 (Document proffered to the witness.)

18 MR. BOUCHER: Can we have marked as Exhibit 1172
19 -- excuse me, 1173, a September 19, 1961 eight-page
20 document "Re: Minutes of August 14, 1961 Meeting" of
21 Vermiculite Institute, signed by Edward R. Murphy,
22 Executive Secretary?

1 (The document referred to
2 was marked Exhibit 1173 for
3 identification.)

4 BY MR. BOUCHER: (Resuming)

5 Q. Have you had an opportunity to read Exhibit 1173?

6 A. No.

7 (Witness peruses document.)

8 Q. We can determine whether you need to read the
9 rest of it.

10 Have you ever seen a copy of Exhibit 1173 prior
11 to today?

12 A. I don't recall it.

13 Q. You are listed as being one of the individuals
14 who is a member of the plaster committee. Do you see that
15 on the front page?

16 A. I do.

17 Q. Okay. It indicates that this is sent to the
18 members of the plaster committee. Do you see that?

19 A. That's correct.

20 Q. Was it generally the practice of the Vermiculite
21 Institute to send copies of minutes such as these to those
22 individuals who are listed as member of the committee to

1 which they're to be sent?

2 A. That's correct.

3 Q. And did you generally receive copies of minutes
4 from committees that you were a member of during the time
5 that you were a member of the Vermiculite Institute?

6 A. That's correct.

7 Q. Okay. Is this the type of document you would
8 have received as a member of the plaster committee?

9 A. That's correct.

10 Q. In 1961 you were a member of the plaster
11 committee of the Vermiculite Institute. Is that correct?

12 A. That's what it says.

13 Q. Okay. What was the plaster committee? What was
14 its job function?

15 A. It was a Vermiculite Institute committee dealing
16 with the aspects of plaster and fireproofing.

17 Q. Do you remember attending a meeting of the
18 plaster committee of the Vermiculite Institute in Chicago,
19 Illinois in or around August of '61?

20 A. I don't.

21 Q. On the second page of Exhibit 1173 it indicates
22 those individuals who were in attendance at the meeting,

1 at the top of the page. Do you see that?

2 A. I see that.

3 Q. It lists you as being one of the members of the
4 committee that were present at the meeting. Do you see
5 that?

6 A. I do.

7 Q. Do you have any reason to believe that Exhibit
8 1173 is inaccurate insofar as it represents that you are
9 one of the individual members of the plaster committee who
10 were present at the August 14, 1961 meeting?

11 A. No.

12 Q. Do you see the second paragraph under "Review of
13 Fire Test Program," Subparagraph (a), the second paragraph
14 under there, where it begins, "Mr. Culver"?

15 A. I see that.

16 Q. Do you recall making a request of the committee
17 as specified in the second paragraph?

18 A. I do not.

19 Q. The second page -- it states it's page two --
20 under Subparagraph (d), "Yield of Type MK-3," do you see
21 that?

22 A. I do.

1 Q. Okay. Does that refresh your recollection at all
2 whether or not there was concern in the committee about
3 the yield of Mono-Kote III as opposed to Mono-Kote I?

4 MR. REPPERT: Objection. There's no prior
5 testimony by this witness on that subject. You haven't
6 established he didn't have a recollection.

7 BY MR. BOUCHER: (Resuming)

8 Q. You may answer the question.

9 A. I don't recall.

10 Q. Moving over to page seven for the Section (13),
11 "Promotional Campaign - Plaster, Acoustical, and
12 Fireproofing Products," do you see that?

13 A. I see that.

14 Q. It indicates that Mr. Boone submitted a letter to
15 the plaster committee outlining a commercial campaign. Do
16 you see that?

17 A. I see that.

18 Q. Okay. Do you have any recollection of what types
19 of promotional campaigns were being developed in 1961 with
20 respect to plaster, acoustical, or fireproofing products?

21 A. I don't recall that.

22 Q. Mono-Kote III would be one -- Mono-Kote I and

1 Mono-Kote III would be two of the types of products that
2 would fall under the category of plaster, acoustical, and
3 fireproofing products, wouldn't they?

4 A. They could be included by this heading.

5 Q. Reading further in that same paragraph it
6 indicates, "He presented details, including advertising,
7 publicity and literature." Does that refresh your
8 recollection at all that the Vermiculite Institute
9 participated in advertising, publicity, and literature
10 with respect to the products that contained vermiculite?

11 A. I don't recall that.

12 Q. Under Category (14), "Annual Meeting," it
13 indicates that, "[T]he Committee recommended to the
14 Marketing Development Committee that a contest for
15 salesmen be established to determine Best Idea in Selling
16 Type MK Fireproofing in Competition." Do you see that?

17 A. I see that.

18 Q. Does that refresh your recollection at all that
19 the marketing development committee was involved in the
20 sales and the development of sales campaigns for Mono-Kote
21 III, or Mono-Kote products?

22 A. I don't recall it.

1 Q. Let me hand you what we will have marked as
2 Exhibit 1174.

3 (Document proffered to the witness.)

4 It is a three-page document. The first page is a
5 letter dated March 25, 1964 to you, W. V. Culver, from E.
6 L. Perrine.

7 (The document referred to
8 was marked Exhibit 1174 for
9 identification.)

10 Do you need to review Exhibit 1174?

11 A. I have.

12 Q. Did you ever see a copy of Exhibit 1174 prior to
13 today?

14 A. I don't recall it.

15 Q. Exhibit 1174 is addressed to you. Do you see
16 that?

17 A. I see it is addressed to me.

18 Q. Did you generally receive, to the best of your
19 recollection and understanding, copies of documents which
20 were addressed to you from ZONOLITE Division of W. R.
21 Grace?

22 A. Generally.

1 Q. Do you have a recollection of what the job duties
2 of Mr. E. L. Perrine as manager of the Evanston Laboratory
3 were with W. R. Grace in March of 1964?

4 A. He was the manager of the Evanston Laboratory.

5 Q. What did he do in that capacity, if you know?

6 A. No, I don't know.

7 Q. Do you recall when ZONOLITE became a division of
8 W. R. Grace?

9 A. I think about 1964.

10 Q. Do you have any understanding as to why Mr.
11 Perrine would be sending you copies of test reports such
12 as the two test reports that are attached to Exhibit 1174?

13 A. I don't recall why he would send that.

14 Q. It indicates on the two attachments to Exhibit
15 1174 that the work was requested by W. V. Culver,
16 Vermiculite Northwest, and J. Huxley, California ZONOLITE.
17 Do you see that?

18 A. I see that.

19 Q. Do you have any recollection as to why you would
20 be requesting work be done by Mr. Perrine at the Evanston
21 Laboratory of the ZONOLITE Division of W. R. Grace?

22 A. I don't recall it.

1 Q. As a licensee of ZONOLITE did you have the
2 ability to request work be done by the laboratories owned
3 and operated by ZONOLITE?

4 A. I don't recall that I had the right to do that.

5 Q. Do you recall whether you ever did that?

6 A. Nope. Don't recall it.

7 Q. When Grace took over ZONOLITE did you continue to
8 be a licensee of W. R. Grace?

9 A. Did I?

10 Q. Right. Did Vermiculite Northwest?

11 A. Yes.

12 Q. And as a licensee of W. R. Grace's ZONOLITE
13 Division were you able to use the resources of W. R. Grace
14 to perform tests?

15 A. I don't know that I had the right to do that, or
16 the ability.

17 Q. Reviewing Exhibit 1174, do you have any
18 understanding as to why Mr. Perrine would be sending you
19 copies of exhibits attached to Exhibit 1174?

20 A. I don't recall it.

21 Q. Do you have any recollection of why you would be
22 interested in the properties of 7EX3 asbestos fiber?

1 A. Only as reported in the test.

2 Q. Do you have any knowledge as to who supplied the
3 asbestos that used in Mono-Kote III?

4 A. The letter of transmittal says they were from
5 California ZONOLITE.

6 Q. It's your understanding from the transmittal
7 letter that the asbestos that was used in Mono-Kote III
8 was supplied by California ZONOLITE?

9 A. No.

10 Q. Do you have any understanding as to who supplied
11 the asbestos used in Mono-Kote III?

12 MR. REPPERT: What time period?

13 MR. BOUCHER: 1964.

14 THE WITNESS: As I recall, where we got some of
15 our asbestos.

16 BY MR. BOUCHER: (Resuming)

17 Q. Where did you get some of your asbestos?

18 A. From Johns-Manville.

19 Q. Anyone else?

20 A. I don't recall who else.

21 Q. Let me hand you what we'll have marked as Exhibit
22 1175.

1 A. I need to -- I want to clarify that this is
2 referring to some asbestos supplied by California ZONOLITE
3 to them for testing. That's all I know about this.

4 Q. All right.

5 MR. REPPERT: By "this," you're referring to the
6 document, Exhibit No. 1174.

7 THE WITNESS: Yeah.

8 (Document proffered to the witness.)

9 MR. BOUCHER: For the record, Exhibit 1175 is a
10 December 23, 1964 copy of minutes, November 30 through
11 December 1, 1964 meeting of the marketing development
12 committee. And it appears to be approximately twelve
13 pages long.

14 (The document referred to
15 was marked Exhibit 1175 for
16 identification.)

17 (Witness peruses document.)

18 MR. REPPERT: Any particular part you want him to
19 look at?

20 MR. BOUCHER: I just want to see if he recalls
21 receiving a copy of Exhibit 1175 prior to today.

22 THE WITNESS: I don't recall that.

1 BY MR. BOUCHER: (Resuming)

2 Q. Exhibit 1175 indicates that it is being sent to
3 members of the marketing development committee. Do you
4 see your name under that category?

5 A. I do.

6 Q. Did you generally receive copies of the minutes
7 of the marketing development committee when you were a
8 member of the committee?

9 A. I did.

10 Q. Pardon me?

11 A. I usually did.

12 Q. At the top of the page it indicates that C. H.
13 Wendel is chairman. Do you see that?

14 A. I see that.

15 Q. Do you recall sitting on the marketing
16 development committee at a time when C. H. Wendel was the
17 chairman of the committee?

18 A. I don't recall specifically.

19 Q. On the front page of Exhibit 1175 it lists a
20 number of people, and the second one is Andy Wise,
21 "Meeting of Agricultural Committee." Do you recall
22 whether or not the Vermiculite Institute had an

1 agricultural committee as a standing committee of the
2 institute in 1964?

3 A. It says they had one here.

4 Q. You don't have any reason to disagree with that?

5 A. I don't.

6 Q. On the first page of the minutes of the meeting
7 of the marketing development committee, it indicates that
8 the following people were present at the Union League Club
9 in Chicago, Illinois on November 30th and December 1,
10 1964, and it lists you as one of those people in
11 attendance. Do you see that?

12 A. I see that.

13 Q. Do you have any reason to disagree with what is
14 reflected in Exhibit 1175 with respect to your presence at
15 the meeting?

16 A. I do not.

17 Q. The first full paragraph under the names listed
18 on the front page indicates that the following people are
19 members of the board of directors, and lists you as a
20 member of the board of directors. Do you recall whether
21 you were a member of the board of directors of the
22 Vermiculite Institute in 1964?

1 A. I do not.

2 Q. Were you ever a member of the board of directors
3 of the Vermiculite Institute?

4 A. I was.

5 Q. And what was your responsibilities as a member of
6 the board of directors of the Vermiculite Institute?

7 A. That of a director, and I don't recall the
8 specific duties.

9 Q. The first category under "General" on page one is
10 "Sales Management Seminar." Does that refresh your
11 recollection at all as to whether or not the marketing
12 development committee was involved in sales management
13 seminars or other types of training of individuals for
14 purposes of selling Mono-Kote -- I mean, vermiculite
15 products?

16 A. I see the notation there. I don't recall it.

17 Q. The fourth page of the minutes, there's a
18 heading, "National Electrical Manufacturers' Assn." Do
19 you see that?

20 A. I see that.

21 Q. Do you recall whether the Vermiculite Institute
22 was involved at any point in time in contacting trade

1 associations to promote the sale and use of vermiculite-
2 containing products?

3 A. I see what it says here. I didn't recall that.

4 Q. That doesn't refresh your recollection at all?

5 A. No.

6 Q. On the next page, which is page five, it
7 indicates "Distribution of Institute Masonry Fill Film."
8 Do you have a recollection of the masonry fill film was?

9 A. I have a vague recollection of that.

10 Q. What was your understanding of what that film
11 was?

12 A. It was a -- my recollection of it, it was a film
13 describing the properties of using vermiculite as a
14 masonry insulation.

15 Q. Okay. And underneath the first paragraph under
16 the Subsection "Distribution of Institute Masonry Fill
17 Film," there is a number of associations and institutes.
18 Do you see that?

19 A. I see that.

20 Q. Okay.

21 MR. REPPERT: I have to object to this line of
22 questioning about masonry fill, because that has nothing

1 whatsoever to do with this case.

2 BY MR. BOUCHER: (Resuming)

3 Q. Does that refresh your recollection at all that
4 the Vermiculite Institute was involved in the distribution
5 of promotional materials to various associations and
6 institutes to promote the sale of vermiculite products?

7 A. I see what it says here. It doesn't --

8 Q. That doesn't refresh --

9 A. -- refresh -- no.

10 Q. Do you recall whether the Vermiculite Institute
11 monitored the sale of Mono-Kote fireproofing products
12 during the time that you were a member of the institute?

13 A. Are you referring to a page here, or is that just
14 a general question?

15 Q. That's just a general question.

16 A. "Monitored" the sales?

17 Q. Right.

18 A. I'm not sure what you mean, "monitored" the
19 sales.

20 Q. Did it try to determine whether or not sales of
21 Mono-Kote fireproofing products were up or down, or
22 anything like that, over the country?

1 MR. REPPERT: This is as of the December, 1964
2 Vermiculite Institute meeting?

3 MR. BOUCHER: I'm just asking generally.

4 MR. REPPERT: Did he at any time try to do that?

5 MR. BOUCHER: I didn't ask "him," I asked, was
6 that one of the things that the Vermiculite Institute did.

7 THE WITNESS: I don't recall.

8 BY MR. BOUCHER: (Resuming)

9 Q. While you were employed by W. R. Grace did you
10 ever provide copies of any articles that appeared in any
11 publications that discussed the health hazards associated
12 with exposure to asbestos to anyone at W. R. Grace?

13 A. I need that question one more time.

14 Q. While you were employed by W. R. Grace, did you
15 ever provide copies of any articles to anyone else
16 employed by W. R. Grace concerning, or that discussed the
17 health hazards associated with exposure to asbestos?

18 A. I don't recall that.

19 MR. BOUCHER: What's your pleasure with respect
20 to lunch?

21 MR. REPPERT: Let's take a break.

22 (Luncheon recess at 12:13 p.m.)

1 AFTERNOON SESSION

2 (1:30 p.m.)

3 Whereupon,

4 WILLIAM V. CULVER

5 the witness on the stand at the time of recess, having
6 been previously duly sworn, was further examined and
7 testified as follows:

8 FURTHER EXAMINATION BY COUNSEL FOR THE PLAINTIFF

9 BY MR. BOUCHER:

10 Q. Mr. Culver, have you ever had your deposition
11 taken prior to today?

12 A. Yes.

13 Q. On approximately how many occasions?

14 A. Three or so; about.

15 Q. Do you recall approximately what years the
16 depositions were taken?

17 A. I think it was this year and last year.

18 Q. Do you remember the names of any of the cases
19 that your deposition was taken in?

20 A. Bartlett High-School. I'm not sure about Kodiak,
21 maybe, and Pacific Northwest Bell.

22 Q. Were those case where the plaintiffs had alleged

1 property damage as a result of the use of Mono-Kote?

2 A. I don't know what their claim was.

3 Q. Do you recall the names of any of the plaintiffs'
4 attorneys representing the plaintiffs in those cases?

5 A. There was a somebody-Harris on one. I don't
6 remember the others.

7 Q. Are you familiar with the Schroeder, Goldmark
8 firm in Seattle?

9 A. It doesn't ring a bell.

10 Q. Do you remember whether the plaintiffs' attorneys
11 who were representing the plaintiffs in any one of these
12 three cases were from the Seattle area?

13 A. I think Harris was.

14 Q. At the time that you were selling Mono-Kote III
15 in the Northwest area, did you believe that Mono-Kote III
16 was safe to be used by consumers on the project?

17 A. I have no reason to believe otherwise.

18 Q. So you believe that it was safe?

19 A. Yes.

20 Q. And at the time that you were involved in the
21 sale of Mono-Kote III did you expect that it could be used
22 without adverse health effects to individuals who were

1 exposed to Mono-Kote III?

2 MR. REPERT: Objection. Are you talking about
3 applicator exposures?

4 MR. BOUCHER: Any exposures.

5 MR. REPERT: There's been no testimony that
6 anybody other than -- that there are any exposures to
7 Mono-Kote III. Strike that.

8 I guess I'm objecting that the word "exposure" is
9 vague, and ask that you define it.

10 BY MR. BOUCHER: (Resuming)

11 Q. You may answer the question.

12 A. I would ask for a definition or an explanation of
13 "exposure."

14 Q. You don't know what the word "exposure" means?

15 MR. REPERT: He's just asking -- he just
16 answered the question by asking you to explain what you
17 mean.

18 BY MR. BOUCHER: (Resuming)

19 Q. Do you know what the word "exposure" means?

20 A. It depends on the kind of exposure you're talking
21 about.

22 Q. When you were selling Mono-Kote III, did you

1 expect that individuals who came into contact with Mono-
2 Kote III -- that there'd be any adverse health effects to
3 individuals who came into contact with Mono-Kote III?

4 A. I do not expect there would be any adverse health
5 effects from MK-3.

6 Q. Now, at the time that you were involved in the
7 sale of Mono-Kote III, did you expect that the use of
8 Mono-Kote III would not have an adverse effect upon
9 buildings where Mono-Kote III was used?

10 MR. REPPERT: On buildings?

11 MR. BOUCHER: Correct.

12 THE WITNESS: Would you repeat that question,
13 please?

14 BY MR. BOUCHER: (Resuming)

15 Q. At the time that you were involved in the sale of
16 Mono-Kote III, you didn't expect it to have an adverse
17 effect upon buildings that were -- where Mono-Kote III was
18 used, did you?

19 MR. REPPERT: Objection. The term "adverse"
20 effect on buildings is completely meaningless to me,
21 anyway, and therefore I object on the grounds that the
22 question doesn't make a bit of sense.

1 BY MR. BOUCHER: (Resuming)

2 Q. You may answer.

3 A. What do you mean by "adverse"?

4 Q. Any adverse effect whatsoever.

5 MR. REPERT: Same objection.

6 THE WITNESS: Do you have some understanding of
7 what you mean, "adverse"?

8 MR. BOUCHER: Adverse means adverse. A negative
9 effect upon the building.

10 MR. REPERT: Same objection. A "negative
11 effect" on a building. I object. That doesn't make any
12 sense. Another question.

13 BY MR. BOUCHER: (Resuming)

14 Q. You may respond.

15 A. I don't know how to answer your question.

16 Q. You don't understand what an adverse or negative
17 effect means?

18 A. That's right.

19 Q. At the time that you were involved in the sale of
20 Mono-Kote III, you did not expect that buildings where
21 Mono-Kote III was used in would have to have the Mono-Kote
22 III removed from the buildings, did you?

1 MR. REPPERT: Now, you're personifying
2 "buildings" in that question. I object on that ground.
3 It doesn't make any sense.

4 BY MR. BOUCHER: (Resuming)

5 Q. You may respond with an answer, sir.

6 A. I had no thought that Mono-Kote III would ever be
7 removed from the buildings.

8 Q. You didn't think it would ever have to be
9 removed, did you?

10 MR. REPPERT: Objection. There's no testimony it
11 does have to be removed, or ever has had to be removed.

12 BY MR. BOUCHER: (Resuming)

13 Q. You may answer the question.

14 A. I think I answer it. I said that at that time I
15 had no thoughts that it would ever be removed.

16 Q. At the time that you were involved in the sale of
17 Mono-Kote III, you didn't expect that occupants of
18 buildings where Mono-Kote III was used would be under any
19 kind of potential health risk as a result of the fact that
20 the buildings had Mono-Kote III in them, did you?

21 MR. REPPERT: Objection. No foundation.

22 THE WITNESS: I had no thought that anybody would

1 be exposed to a hazard from Mono-Kote III.

2 BY MR. BOUCHER: (Resuming)

3 Q. At the time that you sold Mono-Kote III, you
4 didn't expect that by using Mono-Kote III, a building
5 would be damaged as a result of the use of Mono-Kote III
6 in the building, did you?

7 MR. REPERT: Objection. Again, the question
8 doesn't make any sense. Buildings don't use things.
9 People do. I object to the question on the grounds that
10 it's meaningless.

11 BY MR. BOUCHER: (Resuming)

12 Q. You may answer.

13 A. I didn't visualize that a building would be
14 damaged by the use of Mono-Kote III.

15 Q. Thank you. At some point in time did you become
16 aware that there was a likelihood that the Environmental
17 Protection Agency would ban the use of Mono-Kote III?

18 A. Yes.

19 Q. When did you first become aware of the likelihood
20 that the EPA would ban the use of Mono-Kote III?

21 A. I don't remember exactly.

22 Q. Prior to the time that the EPA banned the use of

1 Mono-Kote III, did you become aware that some cities in
2 the United States had banned the use of sprayed-on
3 asbestos-containing fireproofing material, including
4 Mono-Kote, from use?

5 A. I heard that some jurisdictions had banned the
6 use of asbestos.

7 Q. Including the use of Mono-Kote III. Correct?

8 A. Asbestos.

9 Q. And within that, included the ban of the use of
10 Mono-Kote III?

11 MR. REPPERT: Objection. Asked and answered.

12 BY MR. BOUCHER: (Resuming)

13 Q. Correct?

14 A. I don't know that they did that. I said that I
15 understood that they banned the use of asbestos.

16 Q. And you understood, as a result of that ban, that
17 architects could not use Mono-Kote III in those
18 jurisdictions, as a result. Right?

19 A. That's probably not accurate; no.

20 Q. So it was your understanding that in the
21 jurisdictions which banned the use of asbestos-containing
22 products, that Mono-Kote III could also -- could still be

1 used in those jurisdictions. Is that correct?

2 A. No.

3 Q. Well, what was your understanding?

4 MR. REPERT: Objection.

5 THE WITNESS: My understanding was that asbestos
6 was banned in some jurisdictions.

7 BY MR. BOUCHER: (Resuming)

8 Q. Okay. And in some of those jurisdictions where
9 asbestos was banned was it also your understanding that as
10 a result of that ban, people could not use Mono-Kote III?

11 A. They couldn't use any Mono -- any asbestos.

12 Q. Including Mono-Kote III?

13 A. That -- if there is asbestos in Mono-Kote III --

14 Q. It was your understanding at the time that there
15 was asbestos in Mono-Kote III, wasn't it?

16 A. That's right.

17 Q. So as a result of the bans, it was your
18 understanding that people could not use Mono-Kote III in
19 those areas. Right?

20 A. That -- that would follow.

21 Q. Okay. How many months prior to the actual ban on
22 the use of sprayed-on asbestos fireproofing materials by

1 the EPA did you become aware of the likelihood that the
2 EPA would ban the use of sprayed-on asbestos fireproofing
3 material?

4 MR. REPPERT: Objection. Asked and answered.

5 MR. BOUCHER: The question's not been asked.

6 THE WITNESS: I don't know.

7 BY MR. BOUCHER: (Resuming)

8 Q. Was it more than three months?

9 A. I don't know that.

10 Q. Was it more than a year?

11 A. I don't know. I don't recall how much -- when I
12 heard that.

13 Q. What was your understanding as to the reason why
14 the EPA ban on sprayed-on asbestos fireproofing material
15 was also going to include a ban on the use of Mono-Kote
16 III?

17 MR. REPPERT: Objection. No foundation that he
18 knew why the EPA was doing anything.

19 THE WITNESS: I don't know why they did it.

20 BY MR. BOUCHER: (Resuming)

21 Q. You had no understanding?

22 A. No.

1 Q. Nobody from Grace made you aware of the reasons
2 behind it?

3 A. I don't recall.

4 MR. REPPERT: Objection. There's no foundation
5 that anyone at Grace knew the reasons behind it.

6 THE WITNESS: I don't recall.

7 BY MR. BOUCHER: (Resuming)

8 Q. When you learned that it was likely that the EPA
9 was going to ban the use of sprayed-on asbestos
10 fireproofing material, including Mono-Kote III, did you
11 understand that it was as a result of a perceived
12 potential health effect from exposure to asbestos?

13 MR. REPPERT: Objection. He's already testified
14 he didn't know why the EPA acted, therefore he's already
15 answered that question.

16 BY MR. BOUCHER: (Resuming)

17 Q. You may answer.

18 A. I had a hard time following that question. There
19 were too many pieces to it.

20 Q. All right.

21 A. Try me again.

22 Q. Sure. At the time that you became aware that the

1 EPA was likely to ban the use of sprayed-on asbestos-
2 containing fireproofing material, did you gain the
3 understanding that one of the reasons for the ban was the
4 perceived potential health effect from exposure to
5 asbestos?

6 MR. REPPERT: Objection. The witness has already
7 testified that he has no knowledge as to why the EPA took
8 its action. It's merely the same question in different
9 clothing. Asked and answered.

10 THE WITNESS: I don't know why.

11 BY MR. BOUCHER: (Resuming)

12 Q. You had no understanding that the potential
13 health effects of exposure to asbestos had anything to do
14 with that?

15 MR. REPPERT: Objection.

16 BY MR. BOUCHER: (Resuming)

17 Q. Is that correct?

18 MR. REPPERT: Same ground.

19 THE WITNESS: I don't why they did it.

20 BY MR. BOUCHER: (Resuming)

21 Q. Well, I understand that. I'm asking you for your
22 understanding. You had absolutely no understanding that

1 the potential health effects of exposure to asbestos had
2 anything to do with the EPA ban. Is that correct?

3 A. I don't recollect why they did it. I don't know.

4 Q. Okay. When Mono-Kote IV was placed on the market
5 it was an asbestos-free product. Correct?

6 A. That's what I understand.

7 Q. Do you understand that at the time it was placed
8 on the market that it was contaminated with tremolite?

9 MR. REPERT: Objection. No foundation. There's
10 absolutely no evidence to support that in this record.

11 THE WITNESS: I'm not sure -- I don't know what I
12 was aware of at that time.

13 BY MR. BOUCHER: (Resuming)

14 Q. Were you aware at that time that vermiculite --
15 one of the contaminants of vermiculite was tremolite?

16 MR. REPERT: Objection.

17 THE WITNESS: I was aware --

18 MR. REPERT: No foundation.

19 THE WITNESS: I was aware that vermiculite --
20 that asbestos occurred with vermiculite.

21 BY MR. BOUCHER: (Resuming)

22 Q. After you became aware that the EPA was likely to

1 ban the use of sprayed-on asbestos fireproofing materials
2 that contained asbestos, did you continue to sell Mono-
3 Kote III in the Northwest region?

4 A. Yes.

5 Q. And after the time that Mono-Kote IV was placed
6 on the market, and prior to the time that the EPA banned
7 the use of sprayed-on asbestos fireproofing material that
8 contained asbestos, did you continue to sell Mono-Kote
9 III?

10 A. Yes.

11 Q. Why did you continue to sell Mono-Kote III after
12 you learned that the EPA was likely to ban the use of
13 sprayed-on asbestos-containing fireproofing material, and
14 prior to the ban?

15 A. I didn't know of any reason not to sell it.

16 Q. Didn't you understand by that point in time that
17 asbestos was perceived to be a cause of asbestosis and
18 lung cancer?

19 MR. REPPERT: Objection. Argumentative. Asked
20 and answered.

21 THE WITNESS: Asbestos was identified as a -- has
22 been identified as a health hazard at that time.

1 BY MR. BOUCHER: (Resuming)

2 Q. And you were aware of that identification at that
3 time.

4 MR. REPFERT: Objection. Asked and answered.

5 BY MR. BOUCHER: (Resuming)

6 Q. Correct?

7 A. That's correct.

8 Q. Did you have an understanding at that point in
9 time as to the amount of asbestos necessary to cause
10 mesothelioma -- the amount of exposure necessary to cause
11 mesothelioma?

12 A. No.

13 Q. Did you ever see any articles in any trade
14 publications which discussed the potential health hazards
15 associated with exposure to asbestos prior to 1973?

16 A. Other than the NEW YORKER, I don't recall any.

17 Q. Did you see any discussions in any local papers
18 concerning the potential exposure to asbestos prior to
19 1973?

20 A. I think the same applies. I don't recall any.

21 Q. If you had seen articles published in any
22 newspaper or trade publication which discussed the

1 association between exposure to asbestos and its health
2 effects on people, was it part of your responsibility to
3 provide copies of that information to Mr. Wendel?

4 MR. REPERT: Objection. Hypothetical. He's
5 stated he doesn't have any knowledge. It's purely
6 hypothetical. There's no basis for it. Improper
7 question.

8 BY MR. BOUCHER: (Resuming)

9 Q. You may answer.

10 A. I might have.

11 Q. Was that one of your responsibilities, or was
12 that just something that you would have done?

13 A. It's probably something that I would have done as
14 a matter of course.

15 Q. Why?

16 A. Had there been such a thing, it would mean --
17 that was something he would have needed to know.

18 Q. Something he needed to know for what reason?

19 MR. REPERT: Objection. Hypothetical question.
20 Hypothetical foundation.

21 BY MR. BOUCHER: (Resuming)

22 Q. You may answer.

1 A. I think it was my responsibility to keep Mr.
2 Wendel advised of any aspects of our business, and that
3 would have included lots of things.

4 Q. And the potential health hazards associated with
5 exposure to asbestos contained in any of your products
6 would have been one of the things that you felt it was
7 your responsibility to keep him abreast of.

8 MR. REPPERT: Objection. He's instructed not to
9 answer that question. That's a highly improper question.
10 There's no foundation whatsoever that there was any health
11 hazard in connection with asbestos in our products. And
12 you're trying to put words in his mouth, and I'm not going
13 to let you do it. Ask something else.

14 MR. BOUCHER: That's not putting words --

15 MR. REPPERT: Yes, you are. You're trying to get
16 him to say something which is not in the record, has no
17 foundation, and I don't -- I frankly resent it. And I'm
18 not going to let the witness answer that question.

19 BY MR. BOUCHER: (Resuming)

20 Q. Are you going to follow the attorney's
21 instructions and refuse to answer my question?

22 A. That's correct.

1 Q. Are you being represented here by an attorney?

2 A. I am.

3 Q. Who are you being represented by?

4 A. Mr. Reppert.

5 Q. Did you have any discussions with anyone
6 concerning your -- or, in preparation for your deposition
7 here today, other than attorneys?

8 A. I don't think so.

9 Q. Did you review any documents in preparation for
10 your deposition today?

11 A. Yes.

12 Q. What documents did you review?

13 MR. REPERT: He's instructed not to answer that.
14 Work product. Attorney/client.

15 BY MR. BOUCHER: (Resuming)

16 Q. Are you going to follow your attorney's
17 instructions and refuse to answer my question?

18 A. Yes.

19 Q. How many documents did you review in preparation
20 for your deposition?

21 MR. REPERT: Objection. He's instructed not to
22 answer that. Work product.

1 BY MR. BOUCHER: (Resuming)

2 Q. Are you going to follow your attorney's
3 instructions and refuse to answer my question?

4 A. Yes.

5 Q. Were any of the documents that you reviewed in
6 preparation for your deposition today documents that you
7 had in your possession prior your deposition today?

8 MR. REPERT: Objection. He's instructed not to
9 answer that. Work product and attorney/client.

10 BY MR. BOUCHER: (Resuming)

11 Q. Are you going to follow your attorney's
12 instructions and refuse to answer my question?

13 A. Yes.

14 Q. Do you maintain any files at the present time
15 that have anything to do with asbestos or the potential
16 health hazards associated with exposure to asbestos?

17 A. We have a lot of files out at Auburn, and I can't
18 tell you what they are.

19 Q. Who is the custodian of records, of the files?

20 A. My secretary.

21 Q. Let me hand you a one-page letter dated, I
22 believe, January 28, 1969, from W. V. Culver to "Buzz."

1 MR. BOUCHER: We'll have it marked as Exhibit
2 1176.

3 (The document referred to
4 was marked Exhibit 1176 for
5 identification.)

6 BY MR. BOUCHER: (Resuming)

7 Q. Have you had an opportunity to review Exhibit
8 1176?

9 A. Yes. Uh-huh.

10 Q. Do you recall dictating Exhibit 1176?

11 A. No.

12 Q. Is 1176 the type of correspondence that you would
13 normally dictate in the regular course of your business at
14 W. R. Grace?

15 MR. REPERT: Objection.

16 THE WITNESS: Memos to Mr. Wendel are the kind of
17 thing I did.

18 BY MR. BOUCHER: (Resuming)

19 Q. Did you keep or maintain a file of copies of
20 correspondence memos that you sent to Mr. Wendel?

21 A. Files were kept.

22 Q. Do you still maintain custody or control over

1 files containing memorandums that you sent to Mr. Wendel?

2 A. Not that I know of.

3 Q. What did you do with that correspondence?

4 A. I didn't do anything with it.

5 Q. What happened to it?

6 A. Over a period of time stuff is -- we don't keep
7 files for twenty years.

8 Q. What is your policy with respect to keeping
9 files?

10 A. I don't know that we had a policy.

11 Q. Do you have any understanding as to why you would
12 have sent a carbon copy of this memorandum to Mr. Bushell?

13 A. No.

14 Q. Have you any understanding --

15 A. No.

16 Q. -- as to why you would have sent a carbon copy of
17 this memorandum to Mr. Barron?

18 A. Not specifically, no.

19 Q. Do you have any recollection as to why you would
20 have sent a carbon copy of this memorandum to Mr. Egan?

21 A. Not specifically.

22 Q. Do you have any recollection as to why you would

1 have sent a copy of this memorandum to Mr. Dambros?

2 A. No.

3 Q. Do you have an understanding as to why you would
4 have sent a copy of this memorandum to Mr. Wendel?

5 A. Only that it's something that I felt he should
6 know at the time, I guess.

7 Q. Reviewing --

8 A. And likewise, it'd be, to the other people.

9 Q. Reviewing Exhibit 1176, does it refresh your
10 recollection that prior to January 28th, 1969 you had
11 discussions with individuals from W. R. Grace about
12 getting a substitute for asbestos in Mono-Kote?

13 A. I don't recall any such discussions.

14 Q. The second paragraph -- excuse me, the second
15 sentence in this memorandum indicates that, "This might be
16 the answer to a 'maiden's prayer.'" Why did you use the
17 term "maiden's prayer"?

18 A. I sure don't know.

19 Q. What does the term "maiden's prayer" mean to you,
20 sir?

21 A. I don't know what it meant in this context.

22 Q. Well, what does it mean to you, in any context?

1 A. I -- the context -- the maiden is praying for
2 something. I don't know what it means here.

3 Q. So you don't understand why you used the term,
4 "[A] 'maiden's prayer' for getting a substitute for
5 asbestos in Mono-Kote." You have no understanding or
6 recollection of why you used that term?

7 A. I don't recall what happened; how this came
8 about.

9 Q. Your last two words in this memo are
10 "horsefeather problems." Do you see that?

11 A. I see that.

12 Q. What do you mean by the "horsefeather problem"?

13 A. Horsefeathers was an appellation that we applied
14 to sprayed mineral fiber, sprayed asbestos.

15 Q. Did you understand in 1969 that there was a
16 problem with that process?

17 A. I don't recall when I understood there was a
18 problem.

19 Q. Did you regularly read WALLS AND CEILINGS back in
20 1969?

21 A. We had a subscription to it.

22 Q. And did you review it on a regular basis when

1 your subscription came in?

2 A. Not necessarily regularly.

3 Q. In 1969, January of 1969, who was Leslie Barron
4 -- the position held by Leslie Barron?

5 A. He was with the Vermiculite Institute at some
6 time. I don't remember how long he was with them.

7 Q. Was he ever with W. R. Grace?

8 A. Not that I know of.

9 Q. In what capacity was he with the Vermiculite
10 Institute?

11 A. At one time he was executive secretary.

12 Q. Do you recall ever having any discussions with
13 Mr. Barron or anyone else at the Vermiculite Institute
14 about the need for developing an asbestos-free alternative
15 or substitute for Mono-Kote III?

16 A. I don't recall that discussion.

17 Q. Let me hand you what we will have marked as
18 Exhibit 1177. It is a one-page letter dated February 7,
19 1969, to R. W. Sterrett from Leslie A. Barron.

20 (The document referred to
21 was marked Exhibit 1177 for
22 identification.)

1 Have you had an opportunity to review Exhibit
2 1177?

3 A. Yes, I've read this one.

4 Q. Let me give you back Exhibit 1176 for a moment,
5 please. Do you ever recall seeing Exhibit 1176 prior to
6 today?

7 A. Yes.

8 Q. When was the last time you saw Exhibit 1176?

9 A. I don't recall.

10 Q. Did you ever discuss 1176 in any of the
11 depositions that you've had taken?

12 A. Yes.

13 Q. Did you discuss 1176 in all the depositions that
14 you've had taken?

15 A. I don't recall.

16 Q. Have you ever seen Exhibit 1177 before?

17 A. I don't recall seeing this one before.

18 Q. To the best of your understanding, did you
19 generally receive carbon copies of materials sent to you
20 by Leslie A. Barron?

21 A. I received copies of some things from Mr. Barron.

22 Q. Do you have a recollection of what D. J. Boone's

1 position was in February of 1969?

2 A. No.

3 Q. Exhibit 1177 discusses the potential use of glass
4 fiber as a substitute for asbestos in vermiculite Type MK.
5 Having reviewed Exhibit 1177, does it refresh your
6 recollection at all as to when you first heard of the
7 possibility of developing an asbestos-free alternative to
8 MK-3?

9 A. No.

10 Q. Having reviewed Exhibit 1177, do you believe that
11 the first discussions you had with respect to the
12 development of an asbestos-free alternative to MK-3 was
13 prior to February of 1969?

14 A. I don't know that that follows. I don't know
15 when I had it, the first discussion.

16 Q. Having reviewed Exhibit 1177 and 1176, does it
17 refresh your recollection that Mr. Sterrett and Mr. Egan
18 were individuals who you had discussions at W. R. Grace
19 with, with respect to the development of an asbestos-free
20 MK-3?

21 MR. REPERT: I guess I didn't quite follow that
22 question. Could we have it back, or ask it again?

1 MR. BOUCHER: Sure.

2 BY MR. BOUCHER: (Resuming)

3 Q. Having reviewed Exhibits 1177 and 1176, does it
4 refresh your recollection that you had discussions with
5 Mr. Sterrett and Mr. Egan about the possibility of
6 developing an asbestos-free Mono-Kote?

7 MR. REPPERT: Objection. There's no testimony or
8 foundation that he had such discussions.

9 THE WITNESS: I don't remember the discussions.

10 BY MR. BOUCHER: (Resuming)

11 Q. The next to the last paragraph in Exhibit 77
12 reads, "With the comments raised in some corners of the
13 country about asbestos, I wonder if this does not have
14 some merit." Do you see that?

15 A. I see that.

16 Q. Do you have any understanding as to what
17 discussions were occurring, or comments raised in some
18 corners of the country about asbestos in February of 1969?

19 A. I don't know what these specific references are.

20 Q. And you don't have any independent recollection
21 of any discussions or comments around the country about
22 asbestos, and the harmful effects that asbestos may have

1 upon individuals who are exposed to asbestos fibers?

2 MR. REPPERT: Objection. Foundation.

3 THE WITNESS: I've testified about the NEW YORKER
4 article previously.

5 BY MR. BOUCHER: (Resuming)

6 Q. Okay. You don't recall whether the NEW YORKER --
7 having reviewed Exhibits 1177 and 1176, you don't recall
8 whether the NEW YORKER article appeared prior to January,
9 1969, do you?

10 A. No, I don't.

11 Q. Let me hand you what will be marked as Exhibit
12 1178. It is a one-page letter dated March 19, 1977 from
13 T. Egan to a number of individuals, "Subject: Request for
14 Asbestos Content of Mono-Kote by S.O.M." with an
15 attachment from W. V. Culver.

16 (The document referred to
17 was marked Exhibit 1178 for
18 identification.)

19 Have you reviewed Exhibit 1178?

20 A. Yes.

21 Q. Have you ever seen 1178 prior to today?

22 A. Yes.

1 Q. When was the last time you saw Exhibit 1178?

2 A. Yesterday.

3 Q. When you reviewed Exhibit 1178 yesterday, did you
4 recall seeing Exhibit 1178 prior to that time?

5 A. Don't recall it.

6 Q. When you reviewed Exhibit 1178 yesterday, was
7 that with your attorneys?

8 MR. REPPERT: Objection. He's instructed not to
9 answer that.

10 MR. BOUCHER: You're instructing him not to
11 answer whether or not he reviewed this with his attorneys?

12 MR. REPPERT: Yes. You're not entitled to get
13 anything about what communications he had with his
14 attorneys.

15 MR. BOUCHER: Oh, but I'm certainly entitled to
16 find out whether attorneys were present so that I know
17 whether or not I can get into any discussions he had about
18 the document.

19 MR. REPPERT: You can ask him what discussions he
20 had about the document, if you want to.

21 BY MR. BOUCHER: (Resuming)

22 Q. What discussions did you have about Exhibit 1178?

1 MR. REPPERT: He's instructed not to answer that
2 question.

3 BY MR. BOUCHER: (Resuming)

4 Q. Are you going to follow your attorney's
5 instructions and refuse to answer my question?

6 A. Yes.

7 Q. You understand, sir, that by refusing to answer
8 my question, you are forcing me to get a motion to compel
9 you to answer my questions?

10 A. No.

11 Q. Let me tell you that I am going to seek a motion
12 to compel from the magistrate involved in this case to
13 force you to answer my questions with respect to Exhibit
14 1178, and some of the other questions that I've asked that
15 you've refused to answer today.

16 And I will seek, in addition to that, sanctions
17 against you and against your client for your refusal to
18 answer, in addition to costs of me having to come back up
19 here to depose you again.

20 Do you understand that?

21 A. No.

22 Q. Are you still refusing to answer my question

1 about 1178?

2 MR. REPPERT: Your question about 1178? You'd
3 better make it clear what your question is.

4 BY MR. BOUCHER: (Resuming)

5 Q. Are you still refusing to answer as to, one,
6 whether or not you reviewed Exhibit 1178 with attorneys?

7 MR. REPPERT: May we have a quick break?

8 (Discussion off the record.)

9 MR. REPPERT: He's instructed not to answer the
10 question.

11 BY MR. BOUCHER: (Resuming)

12 Q. Are you going to follow the instructions and
13 refuse to answer my question?

14 A. Yes.

15 Q. Sir, what discussions did you have with respect
16 to Exhibit 1178 yesterday?

17 MR. REPPERT: He's instructed not to answer that
18 question to the extent that question covers discussion
19 that he had with his counsel.

20 MR. BOUCHER: Well, there's no information in the
21 record to indicate that he had any discussions with his
22 counsel with 1178, since you've instructed him not to tell

1 me whether or not counsel were present when 1178 --

2 MR. REPERT: I'm instructing him not to answer
3 that question to the extent it requires him to divulge any
4 conversation he had with his counsel.

5 BY MR. BOUCHER: (Resuming)

6 Q. Mr. Culver, did you have any -- who did you --
7 what conversations did you have with respect to 1178
8 yesterday?

9 MR. REPERT: To the extent that in order to
10 answer that, you have to disclose the conversations you
11 had with counsel, you are instructed not to answer. Do
12 you understand my instruction?

13 THE WITNESS: I don't --

14 MR. REPERT: If you had some conversation with
15 someone who is not counsel, to make it perfectly clear --
16 for example, someone you might know outside of -- well, if
17 you had conversations about this document with anyone
18 other than your counsel, yesterday, you may answer the
19 question and describe those conversations. If the only
20 discussions you had regarding this document were with your
21 counsel, then you are instructed not to answer as to those
22 conversations.

1 MR. BOUCHER: I'm going to instruct -- I'm going
2 to object to counsel's comments with respect to Exhibit
3 1178, because there's no evidence in the record to
4 indicate that he had any discussions with any counsel
5 about this document.

6 BY MR. BOUCHER: (Resuming)

7 Q. You may answer my question, sir.

8 A. I'm not going to answer it.

9 Q. In 1970, what was the percentage by way of
10 asbestos content of Mono-Kote III?

11 A. I understand it was about ten percent.

12 Q. From whom did you gain that understanding?

13 A. It's been historic.

14 Q. And from what historian did you gain that
15 information?

16 A. I didn't say from an historian. I said it's been
17 historic that that's about the percentage.

18 Q. Okay. The answer to my question goes back to,
19 from whom did you obtain the information and understanding
20 it was ten percent by weight?

21 MR. REPERT: Objection. Asked and answered.

22 THE WITNESS: I don't know where.

1 BY MR. BOUCHER: (Resuming)

2 Q. Do you have an understanding as to why you
3 received a carbon copy of Exhibit 1178 from Mr. Egan?

4 A. Only that he wanted me to have this information.

5 Q. Do you understand -- have any understanding as to
6 why he wanted you to have this information?

7 A. Only what it said here.

8 Q. As of March of 1970, having reviewed Exhibit
9 1178, do you have any recollection as to whether or not by
10 March of '70 you had discussions with anyone from Grace
11 about the need to develop an asbestos-free alternative to
12 Mono-Kote III?

13 MR. REPERT: Can we take a short break?

14 (Discussion off the record.)

15 MR. REPERT: Well, yeah, go ahead and answer the
16 question.

17 THE WITNESS: The question was?

18 BY MR. BOUCHER: (Resuming)

19 Q. The question was, I believe: do you have any
20 understanding as to why you received a copy of Exhibit
21 1178 from Mr. Egan?

22 A. I think I answered that, that he wanted me to

1 have the information.

2 Q. Do you have any understanding as to why he wanted
3 you to have this information?

4 A. Only what it says here.

5 MR. REPPERT: Let's take a break now. I have a
6 phone call.

7 (Brief recess.)

8 BY MR. BOUCHER: (Resuming)

9 Q. In the second paragraph, the last portion, it
10 says, "[P]lease answer honestly and do not be evasive
11 about the asbestos." Do you have any understanding as to
12 why Mr. Egan put that in there?

13 A. Where are you?

14 Q. Second paragraph.

15 A. Oh, okay. No, I don't why he put it in there.

16 Q. Do you recall what Mr. Burnham's responsibility
17 was in March of 1970?

18 A. He was my counterpart in Phoenix.

19 Q. Who was Mr. Greer?

20 A. He was a licensee in Houston.

21 Q. And who was Mr. Irvine?

22 A. A licensee in Salt Lake City.

1 Q. Who was Mr. Moran?
2 A. A licensee in Dallas.
3 Q. Who was Mr. Roberts?
4 A. A licensee in Great Falls.
5 Q. When was the last time you had any contact with
6 Mr. Wendel?
7 A. Six weeks ago.
8 Q. Do you know where he presently resides?
9 A. Emerald Bay?
10 Q. What State?
11 A. California. I think it's Emerald Bay.
12 Q. Do you know his phone number?
13 A. No.
14 Q. Do you know his address?
15 A. Yes, Emerald -- no, I don't. It's down there
16 somewhere. Easily found.
17 Q. The time you had discussions with Mr. Wendel --
18 A. I'm sorry. Start that again.
19 Q. The time that you had a discussion with Mr.
20 Wendel, this was six weeks ago, did this lawsuit come up
21 during the course of that conversation at all?
22 A. No.

1 Q. Did anything about asbestos and Mono-Kote come up
2 during the course of that conversation?

3 A. No.

4 Q. Let me hand you what we'll now have marked as
5 Exhibit 1179. It is a June 19, 1970 letter from A. W.
6 Dambros to a number of individuals including yourself.

7 (The document referred to
8 was marked 1179 for
9 identification.)

10 Have you had an opportunity to review Exhibit
11 1179?

12 A. I have.

13 Q. It says, "Subject: Recent developments in
14 Asbestos problems." In 1970, what was your understanding
15 of the asbestos problem?

16 A. My understanding of an asbestos problem was that
17 the other material was very asbestosy and caused a lot of
18 problems.

19 Q. And that the problems with the asbestos material
20 would be health effects, or potential health effects, to
21 those individuals who came into contact with the material?
22 Is that correct?

1 MR. REPPERT: Which asbestos material does your
2 question refer to?

3 MR. BOUCHER: The one he just referred to.

4 THE WITNESS: The sprayed asbestos material?

5 MR. BOUCHER: Yes.

6 THE WITNESS: The other kind of material.

7 BY MR. BOUCHER: (Resuming)

8 Q. Was that your understanding?

9 A. That was my understanding.

10 MR. REPPERT: Was what his understanding?

11 MR. BOUCHER: The problem with the health
12 effects, or potential health effects, for those who came
13 into contact with it.

14 MR. REPPERT: Objection to the words "came into
15 contact." It's a vague term. He's already testified that
16 his understanding related to the airborne fibers created
17 by the application of that product.

18 BY MR. BOUCHER: (Resuming)

19 Q. You may answer.

20 A. Restate your question, please.

21 Q. You indicated that you understood the problem was
22 with the asbestos material, and my question to you is, was

1 the problem with the asbestos material the potential
2 health effect on the people who came into contact with
3 that material? It's quite simple.

4 MR. REPPERT: And for purposes of making the
5 record clear, your question refers to the sprayed asbestos
6 fiber material?

7 MR. BOUCHER: My question refers to whatever
8 asbestos material Mr. Culver meant in his answer to my
9 previous question.

10 MR. REPPERT: Okay. In your answer, make it
11 clear what material you're referring to, if you can answer
12 the question as it now sits.

13 THE WITNESS: I hate to do this to you. One more
14 time. Let me be clear of your question.

15 BY MR. BOUCHER: (Resuming)

16 Q. I'll start from the beginning. Exhibit 1179
17 says, "Subject: Recent developments in Asbestos
18 problems." What was your understanding of what was meant
19 by asbestos problems in Exhibit 1179.

20 MR. REPPERT: Objection. No foundation as to
21 what the author meant when it was written.

22 THE WITNESS: My understanding of the asbestos

1 problem is one relating to what did occur with the sprayed
2 asbestos fiber, being the other product, and all of the
3 airborne asbestos that it created.

4 BY MR. BOUCHER: (Resuming)

5 Q. And the potential health effects of that airborne
6 asbestos created for people who came into contact with
7 that airborne asbestos fiber? Is that right?

8 MR. REPERT: Objection to the form of the
9 question.

10 THE WITNESS: I think somebody else established a
11 health hazard.

12 BY MR. BOUCHER: (Resuming)

13 Q. The second paragraph indicates that, "While in
14 our minds the directive very obviously applied to sprayed
15 asbestos, it was in isolated areas used on Mono-Kote
16 operations." Do you have an understanding what is meant
17 by that sentence?

18 A. I don't know what the "directive" was.

19 Q. Okay. The very next sentence says, "The
20 background for the directive everyone is certainly aware
21 of." Do you see that?

22 A. I see it.

1 Q. Okay. And a copy of Exhibit 1179 is directed to
2 your attention, is it not?

3 A. I see it. Yes. My name.

4 Q. Were you aware of the directive that is referred
5 to, that everyone is certainly aware of --

6 MR. REPERT: Objection. He --

7 MR. BOUCHER: -- as referred to in Exhibit 1179?

8 MR. REPERT: He just said he didn't know what
9 the directive was.

10 THE WITNESS: I don't know what the directive
11 was.

12 BY MR. BOUCHER: (Resuming)

13 Q. When is the last time you saw a copy of 1179?

14 A. I don't remember seeing it.

15 Q. Exhibit 1179 has a check by your name. Does that
16 indicate that this would be a carbon copy of the copy that
17 you received?

18 A. I don't how the check got there.

19 Q. Was it normal practice for a check to be placed
20 by the name of the individual whose carbon copy this was?

21 A. I don't know what normal practice is. I don't
22 know how that check got by my name.

1 Q. What was Mr. Dambros' job responsibilities in
2 June of 1970?

3 A. He was my counterpart in the Los Angeles area.

4 Q. On the second page, in the third paragraph, the
5 first sentence reads: "This letter is intended to keep
6 you abreast of what we feel are important developments in
7 this entire picture." Do you see that?

8 A. I see it.

9 Q. What is your understanding of what is meant by
10 the term "this entire picture"?

11 MR. REPPERT: If you know.

12 THE WITNESS: I don't know what he had in mind.

13 BY MR. BOUCHER: (Resuming)

14 Q. The next sentence says: "This letter should not
15 in any way stop us from continuing with our most pressing
16 immediate problem, namely, the elimination of asbestos
17 from our present product." Do you see that?

18 MR. REPPERT: Yeah. And read the rest of that
19 sentence. "However, I personally feel until this does
20 occur we can both morally and honestly continue" --

21 MR. BOUCHER: Counsel, let me ask --

22 MR. REPPERT: -- "promoting Mono-Kote" --

1 MR. BOUCHER: -- my questions.

2 MR. REPERT: -- "without fear." Thank you.

3 MR. BOUCHER: Move to strike counsel's comments
4 from the record.

5 MR. REPERT: It's not a comment. I'm reading
6 the rest of the paragraph.

7 BY MR. BOUCHER: (Resuming)

8 Q. The next sentence reads, "This letter should not
9 in any way stop us from continuing with our most pressing
10 immediate problem, namely the elimination of asbestos from
11 our present product." Do you see that?

12 A. I see that.

13 MR. REPERT: And will you read the next
14 sentence, please?

15 MR. BOUCHER: Can I ask my questions, please?

16 MR. REPERT: You may.

17 MR. BOUCHER: Thank you.

18 MR. REPERT: I'm just asking you to read on.

19 MR. BOUCHER: No. I'm conducting this
20 deposition, thank you.

21 BY MR. BOUCHER: (Resuming)

22 Q. Was it your understanding that the most present

1 immediate -- pressing immediate problem as of June of 1970
2 was the elimination of asbestos from Grace's Mono-Kote
3 III?

4 MR. REPERT: Objection. No foundation.

5 THE WITNESS: That was not my most pressing
6 problem.

7 BY MR. BOUCHER: (Resuming)

8 Q. Was it your understanding that it was Grace's
9 most pressing problem at that point in time?

10 MR. REPERT: Objection. Foundation.

11 THE WITNESS: I don't know what Grace's most
12 pressing problem was.

13 BY MR. BOUCHER: (Resuming)

14 Q. So you were receiving documents such as Exhibit
15 1179, and you had absolutely no understanding in June of
16 -- strike that.

17 You were receiving documents such as Exhibit
18 11979, and you had no understanding in June of 1970 why
19 you were receiving copies of that. Right?

20 MR. REPERT: Objection. Argumentative.

21 BY MR. BOUCHER: (Resuming)

22 Q. Is that correct?

1 MR. REPERT: Argumentative. Objection.

2 THE WITNESS: Just so I'd be kept informed.

3 BY MR. BOUCHER: (Resuming)

4 Q. And at that point in time you had absolutely no
5 understanding that it was a pressing desire of W. R. Grace
6 to develop an asbestos-free alternative or substitute to
7 Mono-Kote III. Right?

8 MR. REPERT: Objection. Argumentative. Asked
9 and answered.

10 BY MR. BOUCHER: (Resuming)

11 Q. Is that your testimony, sir?

12 A. I don't know that the development of a successor
13 to Mono-Kote III was our most pressing problem.

14 Q. Prior to 1973, did you have any inquiries from
15 any State agencies in the Northwestern district with
16 respect to potential health hazards associated with the
17 use of Mono-Kote III?

18 A. I don't recall any.

19 Q. Do you recall the Worker's Compensation Board
20 from the State of Oregon contacting you about potential
21 health hazards associated with the use of Mono-Kote III in
22 1970?

1 A. I don't recall that.

2 MR. BOUCHER: Let me have this February 9, 1970
3 letter from W. V. Culver to Worker's Compensation Board,
4 Labor and Industries Building, Salem, Oregon marked as
5 Exhibit 1180, please.

6 (The document referred to
7 was marked Exhibit 1180 for
8 identification.)

9 BY MR. BOUCHER: (Resuming)

10 Q. Do you see Exhibit 1180?

11 A. I see it.

12 Q. Have you reviewed it?

13 A. Yes.

14 Q. What was Bob Rainfall's position in December of
15 1970?

16 A. Salesman.

17 Q. Why would you have a carbon copy of Exhibit 1180
18 to Mr. Rainfall?

19 A. Randall is his name.

20 Q. Randall. Thank you.

21 A. Because Oregon was his responsibility.

22 Q. Having reviewed Exhibit 1180, does it refresh

1 your recollection that your discussions with the Worker's
2 Compensation Board in Oregon with respect to Mono-Kote and
3 the asbestos-containing aspects of --

4 A. I don't recall it.

5 Q. You don't recall the Worker's Compensation Board
6 inquiring of you regarding the composition of Mono-Kote
7 sprayed fireproofing?

8 A. I do not recall it.

9 Q. Do you recall why you put that Mono-Kote contains
10 approximately eight percent asbestos in the first
11 paragraph of Exhibit 1180.

12 A. No, I don't recall it.

13 Q. As of December of 1970, it was your understanding
14 that Mono-Kote contained approximately eleven percent
15 asbestos, wasn't it?

16 MR. REPPERT: Objection. You've already asked
17 him.

18 BY MR. BOUCHER: (Resuming)

19 Q. Isn't that correct?

20 A. Not according to this letter.

21 Q. I'm not asking you about the letter. I'm asking
22 you what your recollection, your understanding is.

1 A. I have no recollection.

2 MR. BOUCHER: We will have marked as Exhibit 1181
3 -- it is a two-page document with an attached distribution
4 list dated June 26, 1969 from Thomas F. Egan.

5 (The document referred to
6 was marked Exhibit 1181 for
7 identification.)

8 BY MR. BOUCHER: (Resuming)

9 Q. You've had an opportunity to review Exhibit 1181?

10 A. I have.

11 Q. When is the last time you saw Exhibit 1181?

12 A. I don't recall.

13 Q. Do you recall having seen it prior to today?

14 A. I don't recall seeing it.

15 Q. Do you recall having any conversations or
16 discussions with anyone at Grace about the need to
17 advocate attacking Grace's fiber competition?

18 A. I don't any specific discussions.

19 Q. In the last paragraph, the first page, it says:
20 "Combine this with bad practice, sloppy work, medical
21 dangers with asbestos, poor quality materials and you have
22 a real program to go after the architect and get him to

1 remove fibers from his specs and to refuse approval of it
2 on the projects." Do you see that?

3 A. I see it.

4 Q. Did you understand in 1969 that as part of your
5 job as district manager, you were to explain to architects
6 the bad practice, sloppy work, medical dangers with
7 asbestos, poor quality materials with respect to spray-on
8 asbestos fireproofing products?

9 MR. REPPERT: Objection. That question misstates
10 the paragraph you just read -- it mis-paraphrases is,
11 because you say "spray-on asbestos-containing products."
12 Actually it's clear as a bell on its face, it refers to
13 spray fiber products, not all spray-on asbestos-containing
14 products.

15 BY MR. BOUCHER: (Resuming)

16 Q. You may answer the question.

17 A. Restate the question.

18 Q. Did you understand in June of 1969 that as part
19 of your job as district manager, you were to explain to
20 the architect bad practice, sloppy work, medical dangers
21 with asbestos, poor quality materials that coincided with
22 the use of spray asbestos fireproofing materials?

1 MR. REPERT: By "spray asbestos fireproofing,"
2 that question, I take it, means spray fiber fireproofing.
3 Correct?

4 MR. BOUCHER: It does not include cementitious
5 material.

6 MR. REPERT: Thank you.

7 THE WITNESS: My understanding was that we were
8 to put out the deficiencies in the other products in an
9 effort to get them unspecified.

10 BY MR. BOUCHER: (Resuming)

11 Q. Including the deficiencies that are listed in the
12 last paragraph of the first page of Exhibit 1181.
13 Correct?

14 A. I don't ever remember dealing with the medical
15 dangers of asbestos.

16 Q. Let me now hand you a one-page letter and
17 distribution list dated March 13, 1970 from Thomas Egan to
18 Distribution List. It will be marked as Exhibit 1182.

19 (The document referred to
20 was marked Exhibit 1182 for
21 identification.)

22 Have you had an opportunity to review Exhibit

1 1182?

2 A. I have.

3 Q. Have you ever seen Exhibit 1182 prior to today?

4 A. I don't recall it.

5 Q. Do you recall having any conversations with
6 anyone from W. R. Grace with respect to the subject matter
7 discussed in Exhibit 1182?

8 A. I don't have a specific recollection.

9 Q. Do you have any recollection of being told, as
10 set out in the last paragraph of Exhibit 1182, to go back
11 to fundamentals and sell the pluses of Mono-Kote?

12 A. I don't recall this specific direction. We
13 always sold the pluses of it.

14 Q. Let me hand you what we will have marked as
15 Exhibit 1183. It's a one-page letter from Thomas F. Egan
16 to Distribution List dated May 14, 1970, and a copy of the
17 distribution list attached to it.

18 (The document referred to
19 was marked Exhibit 83 for
20 identification.)

21 Have you had an opportunity to review Exhibit
22 1183?

1 A. I have.

2 Q. Have you seen Exhibit 1183 prior to today?

3 A. I don't recall it.

4 Q. Do you recall discussing the subject matter that
5 is contained within Exhibit 1183 with anyone at Grace
6 prior to today?

7 A. I don't have a specific recollection.

8 Q. But a general recollection?

9 A. Other than that U.S. Mineral had developed a new
10 product.

11 Q. Did you have any discussions with anyone about
12 how the effect of the new product -- what kind of an
13 effect the new product would have upon Mono-Kote? The
14 sales of Mono-Kote?

15 A. I don't recall such a discussion.

16 Q. Do you recall having any discussions with anyone
17 at Grace about the fact that the new product by Cafco --
18 by U.S. Mineral Company, was an asbestos-free product, and
19 it would have a negative effect upon the sale of Mono-Kote
20 III?

21 A. I don't recall that discussion.

22 Q. Let me hand you a one-page letter from Thomas

1 Egan to Distribution List dated May 20, 1970, which will
2 be marked as Exhibit 1184.

3 (The document referred to
4 was marked Exhibit 1184 for
5 identification.)

6 Have you had a opportunity to review Exhibit
7 1184?

8 A. I have.

9 Q. Do you recall receiving a copy of Exhibit 1184
10 prior to today?

11 A. I do not.

12 Q. The first paragraph indicates that "Cafco Type D
13 C/F has gotten equivalency from U.L. on most of their
14 floor assemblies, beams and columns." Did you have any
15 understanding in May of 1970 that Cafco had gotten the UL
16 equivalency?

17 A. I don't recall that.

18 Q. The second paragraph indicates -- there's a
19 portion of a sentence that says, "I strongly urge that you
20 start selling strong specs to control in-place density."
21 Do you see that?

22 A. I see that.

1 Q. Do you have any understanding as to why Mr. Egan
2 made that comment in this letter?

3 A. I think it was a problem that Cafco had.

4 Q. In other words, it was a sales technique that
5 could be used to convince architects to spec Mono-Kote
6 over the asbestos-free Cafco product. Correct?

7 A. Against all Cafco products.

8 Q. Correct? Is that "Yes"?

9 A. Yes. All Cafco products.

10 Q. The next paragraph, the last paragraph, says,
11 "This is not street knowledge, so please don't you be
12 guilty in spreading it. Let the" -- and then the next
13 sentence -- "Let the architect or other find out for
14 himself but stress the fact that with or without asbestos,
15 fibers are a poor application without strict density
16 control by spec or better codes." Do you see that?

17 A. I see it.

18 Q. What was your understanding in May of 1970 about
19 what Mr. Egan meant by "don't you be guilty of spreading
20 it"?

21 A. That we're not the ones who spread the
22 information that they have a new product.

1 Q. So don't let the -- don't you be the ones to tell
2 the architects or others who would spec the products that
3 there's an asbestos-free product out there by Cafco.
4 Right?

5 MR. REPERT: Objection. The document speaks for
6 itself.

7 BY MR. BOUCHER: (Resuming)

8

9 Q. Was that your understanding?

10 A. It doesn't say so.

11 Q. Was it your understanding?

12 A. I did not have an understanding back then.

13 Q. You didn't have an understanding one way or the
14 other in 1970 whether you were to inform architects that
15 there was an asbestos-free product put out by Cafco?

16 A. I don't recall what my understanding was in 1970.
17 That's what I see the document saying.

18 Q. Does the document refresh your recollection?

19 A. No.

20 Q. This is Exhibit 1185, an April 17, 1970 letter
21 from Mr. Egan to Distribution List with an attached
22 article titled "Controlling Construction Pollution," and a

1 distribution list attached to it.

2 (The document referred to
3 was marked Exhibit 1185 for
4 identification.)

5 Have you had an opportunity to review Exhibit
6 1185?

7 A. I have.

8 Q. Have you seen a copy of Exhibit 1185 prior to
9 today?

10 A. Yeah, I think I have.

11 Q. When was the last time you saw Exhibit 1185?

12 A. I don't have any idea.

13 Q. Have you reviewed Exhibit 1185 during the course
14 of any of your depositions taken prior to today?

15 A. I don't recall it.

16 Q. The second paragraph of Exhibit 1185, first page,
17 the last sentence reads: "For the present, please sell
18 the inherent advantages of a cementitious product." It's
19 the second paragraph, that sentence [indicating].

20 A. All right.

21 Q. Do you see that?

22 A. Uh-huh.

1 Q. What was your understanding of what was meant by
2 that sentence?

3 A. The -- several advantages of a cementitious
4 product was that it didn't spray stuff all over the
5 atmosphere.

6 Q. The sentence is prefaced with "For the present."
7 Is it your understanding that the reason for that preface
8 is the fact that Mono-Kote -- that Grace was in the
9 process of developing an asbestos-free substitute for
10 Mono-Kote III?

11 A. I don't know what all he would have meant by that
12 phrase.

13 Q. What is it you understood by that phrase?

14 MR. REPERT: Objection. He just testified he
15 didn't know.

16 THE WITNESS: I don't know what all he would have
17 meant by that phrase.

18 BY MR. BOUCHER: (Resuming)

19 Q. You didn't have any understanding one way or the
20 other?

21 A. No.

22 MR. REPERT: Objection. Asked and answered.

1 BY MR. BOUCHER: (Resuming)

2 Q. The last paragraph indicates, "This article,
3 having been written by Mr. Rosen, would be an ideal piece
4 to distribute or at least use as a point of reference with
5 all architects and engineering firms." Do you see that?

6 A. I see that.

7 Q. Did you use the article that was attached as a
8 point of reference with architects and engineering firms?

9 A. Not that I recall.

10 Q. Did you understand that one of the purposes for
11 obtaining a copy of the article which is attached to
12 Exhibit 1185 was so that it could be used with architects
13 and engineering firms?

14 A. That's what he said.

15 Q. And it could be used in such a way as to sell the
16 distinction or advantages of Mono-Kote III, which is a
17 cementitious product, over the sprayed-on asbestos
18 fireproofing products? Is that correct?

19 A. As I read the article, it's referring to the
20 sprayed asbestos products.

21 Q. And the article could be used as a means of
22 promoting the sale of Mono-Kote III as an alternative to

1 the sprayed fiber products. Right? That was the intent?

2 MR. REPPERT: Objection. The question asked was
3 what Mr. Egan's intent was. This witness can't answer
4 that.

5 BY MR. BOUCHER: (Resuming)

6 Q. Is that what your understanding is?

7 A. That's what it says. The cover letter would
8 suggest it.

9 Q. We have marked as Exhibit 1186 a one-page letter
10 from Mr. Egan to Distribution List dated June 25, 1970.

11 (The document referred to
12 was marked Exhibit 1186 for
13 identification.)

14 Have you reviewed Exhibit 1186?

15 A. I do. I have.

16 Q. Do you recall receiving a copy of Exhibit 1186
17 prior to today?

18 A. I don't recall it.

19 Q. The first sentence says, "The heat from the
20 asbestos problem is radiating in many directions." Do you
21 see that?

22 A. I see that.

1 Q. Do you have any understanding of what Mr. Egan
2 meant by that phrase?

3 A. No.

4 Q. Did you have any discussions with anyone at Grace
5 about the subject matter that is outlined in Exhibit 1186?

6 A. I don't recall it.

7 Q. Let me hand you what we'll have marked as Exhibit
8 1187, which is a one-page letter from Thomas Egan dated
9 August 20, 1970, to Distribution List.

10 (The document referred to
11 was marked Exhibit 1187 for
12 identification.)

13 Have you had an opportunity to review Exhibit
14 1187?

15 A. Yes.

16 Q. Have you seen Exhibit 1187 prior to today?

17 A. I don't recall it.

18 Q. The first paragraph indicates that there is
19 attached a program prepared by Ralph Bragg which is a
20 status report on research efforts outlined at the meeting
21 in Cambridge on July 28th and 29th. Do you have any
22 understanding of what meeting that's referring to?

1 A. No.

2 Q. Were you regularly updated on the research and
3 development program for asbestos-free Mono-Kote?

4 A. Not that I know of.

5 Q. The third paragraph begins: "The research work
6 is involved in the most emotional and controversial area
7 of construction pollution." Do you see that?

8 A. I see that.

9 Q. Do you have any understanding of what is meant by
10 that phrase?

11 A. Only the contents of this letter.

12 Q. You don't have an independent recollection?

13 A. No, I don't.

14 Q. The next paragraph after that, the last portion
15 of the sentence reads: "[T]he health hazard of asbestos
16 will require the ban on loose asbestos particles to the
17 atmosphere, and probably within one year." Do you see
18 that?

19 A. Yeah, I see it.

20 Q. Do you have a recollection of having any
21 discussions with anyone from W. R. Grace about the
22 probability as of August of 1970 that there would be a ban

1 on loose asbestos particles?

2 A. I don't recall that.

3 Q. The next paragraph indicates that, "Already we
4 have lost a major project in Philadelphia; and I'm sure
5 others may follow across the country." Do you see that?

6 A. You have a better copy than I do.

7 Q. Do you have any recollection of discussing with
8 anyone at Grace the loss of a major project in
9 Philadelphia?

10 A. Not that I recall.

11 Q. The next sentence says, "The asbestos-free
12 product will get the order." Do you have any recollection
13 of discussing in 1970 the fact that asbestos-free products
14 would begin to get the orders for asbestos fireproofing?

15 A. Not that I remember.

16 Q. Isn't it true that as of August of 1970 you
17 understood that the reason why there was a need to get an
18 asbestos-free substitute for Mono-Kote III was that the
19 asbestos-free product would get the order in the
20 marketplace?

21 A. No.

22 Q. The next paragraph begins with: "Knowing this, I

1 again want to emphasize the importance of the 'Long range'
2 development program discussed in our July meeting." Do
3 you see that?

4 A. I see that.

5 Q. Do you have any recollection of what the long
6 range development program, as of August of 1970, was, for
7 Mono-Kote III?

8 A. I don't recall that.

9 Q. The last sentence in that paragraph reads, "The
10 market belongs to the firm that provides a new 'pollution-
11 free' spray cementitious product. Did you understand that
12 as of August, 1970, W. R. Grace was attempting to develop
13 a pollution-free spray cementitious product?

14 MR. REPPERT: Objection.

15 THE WITNESS: I think that's what this says.

16 BY MR. BOUCHER: (Resuming)

17 Q. Was that your understanding?

18 A. No. I don't know when they were doing what.

19 Q. By 1970 were you aware that Mono-Kote III was
20 being included within the term "spray fireproofing"?

21 A. By whom?

22 Q. By industry.

1 MR. REPPERT: Objection. No foundation.

2 THE WITNESS: I considered Mono-Kote III to be
3 spray fireproofing.

4 BY MR. BOUCHER: (Resuming)

5 Q. You did?

6 A. I did.

7 Q. Let me hand you what we'll have marked as Exhibit
8 1188, which is a two-page letter to William V. Culver
9 dated March 23, 1971, from Wesley D. Snowden, Manager,
10 Environmental Services, Valentine, Fisher & Tcmlinson,
11 with a one-page attachment.

12 (The document referred to
13 was marked Exhibit 1188 for
14 identification.)

15 Have you had an opportunity to review Exhibit
16 1188?

17 A. I have.

18 Q. Do you recall receiving a copy of Exhibit 1188
19 prior to today?

20 A. No, I don't.

21 Q. Do you recall discussing the subject matter of
22 Exhibit 1188 with anyone at W. R. Grace?

1 A. I don't recall that discussion.

2 Q. Do you recall participating in any efforts to
3 present information to the legislature of the State of
4 Washington with respect to asbestos?

5 A. No, I don't.

6 Q. The attachment to Exhibit 1188 is a memo from you
7 to the Committee on Business and Professions submitted on
8 behalf of ZONOLITE Division of W. R. Grace dated March 22,
9 1971. Do you see that?

10 A. I see that.

11 Q. Do you recall having a copy of Exhibit -- the
12 attachment to Exhibit 1188, having that sent to the
13 Committee on Business and Professions?

14 A. I don't recall that.

15 Q. Do you recall participating in any way with
16 anyone at W. R. Grace an attempt to have language that was
17 being considered by the Committee on Business and
18 Professions with reference to House Bill No. 927 amended?

19 A. I have no recollection of this occurrence.

20 Q. Let me hand you a copy of a two-page letter dated
21 April 1, 1971 to Mr. Gene Gillison, G-i-l-l-i-s-o-n,
22 Seattle Chamber of Commerce, Seattle, Washington,

1 "Reference: House Bill 927" from William V. Culver.

2 We'll have it marked as Exhibit 1189.

3 (The document referred to
4 was marked Exhibit 1189 for
5 identification.)

6 Have you had an opportunity to review Exhibit
7 1189?

8 A. Yes.

9 Q. Have you seen Exhibit 1189 prior to today?

1. A. Yes.

11 Q. When is the last time you saw Exhibit 1189?

12 A. Yesterday.

13 Q. Did you have discussions with anyone about
14 Exhibit 1189?

15 A. Yes.

16 Q. Were any attorneys on behalf of W. R. Grace
17 present during any of those discussions?

18 A. Yes.

19 Q. Okay. Other than discussions that you had
20 yesterday about Exhibit 1189, had you had any discussions
21 with anyone else, where Grace attorneys were not present,
22 about Exhibit 1189, that you can recall?

1 A. I don't recall.

2 Q. Do you recall sending a copy of Exhibit 1189 to
3 Mr. Killion?

4 A. I don't recall it.

5 Q. Do you recall talking to anyone at W. R. Grace
6 about the substance of what is referred to in Exhibit
7 1189?

8 A. I don't recall that discussion.

9 Q. Let me hand you a one-page to C. H. Wendel from
10 Culver dated May 10, 1971, and ask that it be marked
11 Exhibit 1190.

12 (The document referred to
13 was marked Exhibit 1190 for
14 identification.)

15 Have you had an opportunity to review Exhibit
16 1190?

17 A. Yes.

18 Q. Is that your signature that appears on 1190?

19 A. No.

20 Q. Is that a signature of a secretary that would
21 sign on your behalf?

22 A. I don't know who did it.

1 Q. Have you seen Exhibit 1190 prior to today?

2 A. Yes.

3 Q. When is the last time you saw Exhibit 1190?

4 A. Yesterday.

5 Q. Were attorneys for W. R. Grace present at the
6 time that you saw 1190?

7 A. Yes.

8 Q. Other than yesterday, did you have any
9 discussions with anyone concerning the contents of Exhibit
10 1190, other than discussions you may have had yesterday,
11 with individuals who were present from W. R. Grace?

12 A. Not that I recall.

13 Q. Do you recall sending Exhibit 1190 to Mr. Wendel?

14 A. No.

15 Q. Do you recall making a request of Mr. Wendel to
16 hire a person by the name of Wes Snowden?

17 A. This reminds me that, yes, we had an offer -- an
18 offer to Wes.

19 Q. Did you hire Wes?

20 A. I think we paid him \$50.00.

21 Q. What did you mean by the phrase "would defend us
22 adequately if a discussion comes up regarding asbestos"?

1 A. I think he knew the difference between us and the
2 other stuff.

3 Q. Did you have discussions with him to make sure
4 that he understood the difference?

5 A. He knew the difference without any discussion.

6 Q. How do you know?

7 A. Because that was his business.

8 Q. What was his business at that time?

9 A. He was a consulting engineer.

10 Q. From where?

11 A. Seattle.

12 Q. Was he affiliated with any firm at that time?

13 A. Yes.

14 Q. What was the name of the firm?

15 A. Valentine, Fisher & Tomlinson.

16 Q. What was the purpose behind hiring Mr. Snowden as
17 a consultant?

18 A. To my recollection, he was going to go to a
19 conference, and he wanted some help to get there.

20 Q. Do you know of Mr. Snowden being instrumental in
21 having both the Chamber of Commerce and the Mechanical
22 Engineers Association support the amendment on asbestos

1 which you proposed to the State Legislature?

2 A. I do not.

3 Q. Did you ever have any discussions with your
4 brother concerning potential health hazards associated
5 with exposure to asbestos?

6 A. Yes.

7 Q. When is the first discussion that you ever had
8 with your brother concerning potential health hazards
9 associated with exposure to asbestos?

10 A. I do not know.

11 Q. Was it in and around 1971?

12 A. I do not know.

13 Q. Was it prior to the time that he EPA banned the
14 use of spray-on asbestos-containing fireproofing products?

15 A. I don't know.

16 Q. Was your brother involved in occupational studies
17 with respect to asbestos at that period of time?

18 A. I don't know.

19 Q. What was your brother's occupation in 1972?

20 A. He was a doctor.

21 Q. Doctor of what?

22 A. Medicine.

1 Q. What kind of medicine?

2 A. Environmental medicine.

3 Q. Was he affiliated as an associate professor at
4 the University of California, Irvine, Medical Center?

5 A. Was he?

6 Q. Yes.

7 A. At that time?

8 Q. Yes.

9 A. I don't know.

10 Q. Was he ever?

11 A. Yes.

12 Q. And you don't recall whether or not he was
13 involved in occupational asbestos studies with the
14 University of Irvine at any point in time?

15 A. At any point in time?

16 Q. Right.

17 A. Yes.

18 Q. Was he?

19 A. Yes.

20 Q. When was he first involved in those types of
21 studies?

22 A. I don't know.

1 Q. What is his name?

2 A. Dwight.

3 Q. Dwight Culver?

4 A. Uh-huh.

5 Q. Did you have any discussions with your brother
6 about any potential health hazard associated with Mono-
7 Kote III?

8 MR. REPERT: There's been no testimony there was
9 any such potential health hazards associated with Mono-
10 Kote III.

11 THE WITNESS: I don't recall any discussion.

12 BY MR. BOUCHER: (Resuming)

13 Q. Did you ever discuss with your brother the fact
14 that Mono-Kote III contained asbestos?

15 A. I don't recall that either.

16 Q. Did your brother ever provide you with any
17 literature concerning potential health hazards associated
18 with exposure to asbestos?

19 A. I don't recall.

20 Q. Did you ever make any requests of Mr. Pickthall
21 at any point in time for any asbestos fiber count reports
22 that he was involved with?

1 A. Yes.

2 Q. Do you recall when you made those requests of
3 him?

4 A. No.

5 Q. What was your understanding of Mr. Culver's
6 responsibility in 1971 at W. R. Grace?

7 A. Pickthall, you mean?

8 Q. Pickthall. Yeah. What was your understanding of
9 Mr. Pickthall's responsibilities at W. R. Grace in 1971?

10 A. He was my counterpart in the Bay Area.

11 Q. Did you understand that certain people within the
12 building trade were associating Mono-Kote III with spray
13 asbestos fireproofing products in terms of potential
14 health hazards associated with its use?

15 MR. REPERT: Objection. Assumes facts not in
16 evidence. No foundation.

17 THE WITNESS: Would you restate the question?

18 BY MR. BOUCHER: (Resuming)

19 Q. Did you have an understanding in 1970 that people
20 within the buildings trade or building profession were
21 associating Mono-Kote III with spray asbestos fireproofing
22 products in terms of potential health hazards associated

1 with its use?

2 MR. REPPERT: Objection. No foundation.

3 THE WITNESS: I'm not aware of that.

4 BY MR. BOUCHER: (Resuming)

5 Q. Let me hand you what we'll have marked as Exhibit
6 1191. It is a one-page document dated, it appears,
7 December 16, 1971 from Mr. Culver to Tom Egan.

8 (The document referred to
9 was marked Exhibit 1191 for
10 identification.)

11 Have you had an opportunity to review Exhibit
12 1191?

13 A. Uh-huh.

14 Q. Do you recall sending a copy of Exhibit 1191 to
15 Mr. Egan?

16 A. I do not.

17 Q. Do you have any reason -- do you have any
18 understanding as to why you would send a copy of Exhibit
19 1191 to Mr. Egan in 1970?

20 A. Other than what the document says, I don't know
21 why.

22 Q. The last sentence of the documents says, "It

1 would be nice if Mono-Kote could get a clean bill of
2 health as compared to fuzz, with or without asbestos." Do
3 you see that?

4 A. I see that.

5 Q. What do you mean by the term "fuzz"?

6 A. That's the other stuff.

7 Q. That would be spray asbestos fireproofing?

8 (The witness shakes head.)

9 Is that a "Yes"?

10 A. That's the only accepted term for it. Yes.

11 Q. What did you mean by the term, "It would be nice
12 if Mono-Kote could get a clean bill of health as compared
13 to fuzz, with or without asbestos"?

14 A. It's another study -- well --

15 Q. Doesn't it refresh your recollection that as of
16 1970, you were of the opinion that Mono-Kote III was being
17 lumped in as "fuzz" asbestos-containing fireproofing
18 products?

19 A. It would be nice if they -- the study, whatever
20 it was, could show the distinction.

21 Q. And it would be nice because at that time Mono-
22 Kote was being lumped in with the fuzz fireproofing

1 product. Right?

2 A. Follows --

3 Q. Pardon me?

4 A. I don't think that follows.

5 Q. Well, isn't that true? Having reviewed Exhibit
6 1191, doesn't that refresh your recollection that Mono-
7 Kote III was being compared to or lumped with fuzz
8 asbestos-containing fireproofing product?

9 A. Not by anybody who understood the differences.

10 Q. Were there people responsible for public health
11 in the Northwest region who didn't understand the
12 distinction?

13 MR. REPPERT: Objection. No foundation.

14 BY MR. BOUCHER: (Resuming)

15 Q. That you were aware of?

16 A. No.

17 Q. Didn't you receive correspondence from Mr. Egan
18 and from Mr. Wendel indicating to you not to assume that
19 local public health officials understand the distinction
20 between fuzz fireproofing product and Mono-Kote III?

21 A. I don't recall that association with public
22 health officials.

1 MR. BOUCHER: This will be what will be marked as
2 Exhibit 1192. It's a one-page document dated December 17,
3 1970 from William V. Culver to C. H. Wendel in L.A.

4 (The document referred to
5 was marked Exhibit 1192 for
6 identification.)

7 BY MR. BOUCHER: (Resuming)

8 Q. Have you had an opportunity to review Exhibit
9 1192?

10 A. Yes.

11 Q. Have you seen Exhibit 1192 prior to today?

12 A. Yes.

13 Q. When was the last time you saw Exhibit 1192?

14 A. Yesterday.

15 Q. Did you have any discussions yesterday with
16 anyone about Exhibit 1192?

17 A. Yes.

18 Q. Were attorneys on behalf of W. R. Grace present
19 during any of those discussions?

20 A. Yes.

21 Q. Other than discussions that you had yesterday
22 about 1192, have you had any discussions with anyone else

1 about Exhibit 1192?

2 A. Not that I'm aware of.

3 Q. Do you recall sending a copy of Exhibit 1192 to
4 Mr. Wendel?

5 A. No.

6 Q. Do you recall having any discussions with Mr.
7 Wendel about the subject matter of what is contained in
8 Exhibit 1192?

9 A. No.

10 Q. Do you have any recollection of what is meant by
11 the last sentence in the first paragraph, "I think with
12 low air pressures and good housekeeping on the job we
13 might even be able to function with a lower TLV than the"
14 -- it looks like "present 5."

15 A. Only what it says there.

16 Q. In the second paragraph, the next to the last
17 sentence reads, "If that could be done, it would make it
18 more difficult for the sprayed fiber people to compete
19 with MK-4 even." Do you see that?

20 A. I see it.

21 Q. Does that refresh your recollection at all as to
22 when MK-4 was first available?

1 A. No.

2 Q. Does it refresh your recollection that MK-4 was
3 available prior to December of 1971?

4 A. I don't think it says that.

5 MR. BOUCHER: I'll have this marked as Exhibit
6 1193. It's a one-page document dated January 4, 1972 to
7 W. K. Rogers, Regional Manager, Eastern Region. It's from
8 William V. Culver.

9 (The document referred to
10 was marked Exhibit 1193 for
11 identification.)

12 BY MR. BOUCHER: (Resuming)

13 Q. Have you had an opportunity to review Exhibit
14 1193?

15 A. Yes.

16 Q. Have you seen Exhibit 1193 prior to today?

17 A. I don't recall seeing it. but I remember the job,
18 vaguely.

19 Q. Do you recall sending a copy of Exhibit 1193 to
20 Mr. Rogers?

21 A. No, not specifically.

22 Q. The fourth paragraph of Exhibit 1193 says, "Is

1 MK-3 still acceptable in that market, or is it necessary
2 to go to MK-4?" Do you see that?

3 A. I see that.

4 Q. Do you have any recollection as to why you wanted
5 to know whether MK-3 was still acceptable in the Detroit
6 market?

7 A. Since the architect was in the Seattle area, if
8 the MK-3 was not acceptable, then we'd get MK-4 specified
9 in that market.

10 Q. As of January, 1972, was it your understanding
11 that the reason why MK-3 might not be acceptable in the
12 Detroit market was that it contained asbestos?

13 A. I don't know why it wouldn't have been
14 acceptable.

15 Q. Do you know why you would ask whether it was
16 still acceptable?

17 A. Only in the case that it was not acceptable.

18 Q. Not acceptable for what reason?

19 A. For whatever reason they decided it wasn't
20 acceptable.

21 Q. Do you have any understanding as to why MK-3
22 would not be acceptable, but MK-4 would be acceptable,

1 other than the fact that MK-3 had asbestos in it?

2 A. Only that the jurisdiction said, or whoever said,
3 they didn't want MK-3.

4 Q. Because of the asbestos in it.

5 A. For whatever reason they decided.

6 Q. For whatever reason they decided they didn't want
7 asbestos-containing fireproofing products. Is that what
8 you mean?

9 A. They would have had to explain why they didn't
10 want it.

11 Q. So as of January, 1972, if I understand your
12 testimony correctly then, you had an understanding that
13 some jurisdictions did not permit the use of MK-3, and
14 that they had various reasons for not permitting the use,
15 not limited to the fact that MK-3 contained asbestos. Is
16 that correct?

17 A. I'm not saying that. I don't know why they
18 didn't want it, other than that they didn't accept MK-3.

19 Q. Then it was your understanding that markets that
20 didn't accept MK-3 did accept MK-4. Right?

21 A. I don't know that.

22 Q. So you don't have any understanding as to why you

1 put that in this letter?

2 A. If he wanted MK-4 specified, we would specify it.
3 If he wanted MK-3 specified, we would specify that, too.

4 Q. The next sentence says, "We have managed to hang
5 on to MK-3." What did you mean by that?

6 A. I mean that we were specifying MK-3.

7 Q. Well, what did you mean by "hang on to"?

8 A. Still specifying MK-3.

9 Q. Well, is there something -- some reason why you
10 wouldn't be able to continue to hang on to MK-3 at that
11 point in time?

12 A. We were able to.

13 Q. Was there any anticipation that you wouldn't be
14 able to hand on to MK-3 at that point in time?

15 A. I had no anticipation that we wouldn't.

16 Q. Then why did you say that "We have managed to
17 hang on to MK-3?

18 A. Because that's why we were -- what we were
19 specifying.

20 Q. The truth is, the reason why you put in "We have
21 managed to hang on to MK-3 is that MK-3 contained
22 asbestos, and there was some anticipation that MK-3

1 wouldn't be allowed in certain jurisdictions because of
2 the fact that it contained asbestos. Isn't that true?

3 MR. REPPERT: Objection. Argumentative.

4 THE WITNESS: I don't know that that's a valid
5 argument.

6 BY MR. BOUCHER: (Resuming)

7 Q. The same sentence goes on, "[A]nd will be writing
8 T.L.V. specifications when the use of asbestos in MK-3 is
9 questioned." What did you mean by that?

10 A. A threshold limit value -- T.L.V. -- quantifies
11 what was then acceptable limits for use of asbestos in any
12 product.

13 Q. Is T.L.V. specifications something that you
14 understood you could write?

15 A. We could influence the specification to include a
16 threshold limit value.

17 Q. And in 1972 were there instances where MK-3 was
18 questioned as a result of the fact that it contained
19 asbestos?

20 A. I don't recall any.

21 Q. Do you have any recollection as to why you added
22 that portion to the last sentence?

1 A. I don't have a specific recollection of why.

2 Q. What about a general recollection?

3 A. I don't have a specific job where I would have
4 written a T.L.V. that I recall.

5 MR. BOUCHER: We'll take a break.

6 (Brief recess.)

7 MR. BOUCHER: I'd like to have this marked as
8 Exhibit 1194, a two-page document dated March 27, 1972, to
9 Mr. R. B. Moran, President, Texas Vermiculite Company,
10 from William V. Culver.

11 (The document referred to
12 was marked Exhibit 1194 for
13 identification.)

14 BY MR. BOUCHER: (Resuming)

15 Q. have you had an opportunity to review Exhibit
16 1194?

17 A. I have.

18 Q. Have you ever see Exhibit 1194 prior to today?

19 A. I kind of remember it from a long time ago.

20 Q. Is that your signature that appears on the second
21 page?

22 A. Nope.

1 Q. Is that your handwriting that appears on the top
2 of the first page?

3 A. No.

4 Q. In the third to the last paragraph on the first
5 page it says, "We are still using MK-3 locally and don't
6 anticipate any problem of maintaining this approval. We
7 would just as soon not have any reference made to MK-4."
8 Do you see that?

9 A. I see that.

10 Q. Why did you say you would just as soon not have
11 any reference made to MK-4?

12 A. We were using MK-3 locally.

13 Q. Why wouldn't you want a reference to MK-4?

14 A. I saw no reason to have it mentioned.

15 Q. Why not?

16 A. We weren't using it locally. MK-3 was fine.

17 Q. MK-4 did not contain asbestos. Correct?

18 A. That was my understanding.

19 Q. Didn't you feel, as of March, 1972, that it was
20 prudent to offer an asbestos-free alternative to MK-3 to
21 the public?

22 A. No.

1 Q. Is the fact that MK-4 was an asbestos-free
2 alternative to MK-3 the reason why you didn't want any
3 reference made to it locally?

4 A. Say that one more time?

5 MR. REPPERT: He's already answered the question
6 as to why he didn't want reference to it locally.

7 BY MR. BOUCHER: (Resuming)

8 Q. Isn't it true that the reason why you didn't want
9 local reference made to MK-4 is that it was an asbestos-
10 free alternative to MK-3, and you didn't want that issue
11 raised in this area?

12 A. No.

13 Q. If Grace was producing a product that was a
14 fireproofing product, wasn't it one of your jobs to
15 attempt to sell as much of that product as you could?

16 A. I think my job was to sell our products that best
17 fitted the needs of the marketplace.

18 Q. Wasn't one of the needs of the marketplace in
19 1972 an asbestos-free alternative to asbestos-containing
20 fireproofing products?

21 A. Not that I was aware of.

22 Q. Well, you recall receiving prior to March of 1972

1 letters from Mr. Egan indicating that the company that
2 puts the first asbestos-free fireproofing product on the
3 market will be the company that gets the market itself?

4 MR. REPERT: Objection. Contrary to his prior
5 testimony as to the recollection of receiving those
6 documents.

7 BY MR. BOUCHER: (Resuming)

8 Q. You'd received those, hadn't you?

9 A. I didn't recall receiving those. I've seen them
10 today.

11 Q. So you just felt that there was no real need to
12 let anybody up here know about MK-4, so let's not mention
13 it, huh?

14 MR. REPERT: Objection. That's argumentative.

15 BY MR. BOUCHER: (Resuming)

16 Q. Is that what you felt in March of 1972?

17 A. No. Mono-Kote III we were using locally, and why
18 confuse the marketplace?

19 Q. How would the use of MK-4 confuse the
20 marketplace?

21 A. MK-4 was not introduced here.

22 Q. So in March of 1972 it was one of your

1 responsibilities as a district manager for W. R. Grace to
2 sell as much Mono-Kote III as you possibly could. Right?

3 A. It was my responsibility to sell as much of the
4 Grace products as I could.

5 Q. Including the asbestos-containing Mono-Kote III
6 product. Right?

7 A. Including Mono-Kote III.

8 Q. And you attempted to do that to the best of your
9 ability, and that is sell as much asbestos-containing
10 Mono-Kote III as you could in 1972, didn't you?

11 MR. REPERT: Objection. Asked and answered.

12 MR. BOUCHER: I asked him if that was his job,
13 and now I'm asking if he attempted to do that.

14 MR. REPERT: I think you've asked the same thing
15 about five times.

16 THE WITNESS: I attempted to sell as much Mono-
17 Kote III as I could.

18 BY MR. BOUCHER: (Resuming)

19 Q. And you attempted to sell as much Mono-Kote III
20 product as you possibly could, despite the fact that there
21 was an asbestos-free Mono-Kote IV product available?

22 MR. REPERT: I'm sorry, you've done this four

1 times. He's answered it four or five times. You're
2 trying to put words in his mouth. He's answered the
3 question. Move on to something else.

4 BY MR. BOUCHIER: (Resuming)

5 Q. Isn't that correct?

6 A. I attempted to sell as much Mono-Kote III as I
7 could.

8 Q. Let me hand you what we have marked as Exhibit
9 1195, which is a one-page letter to George Bryant, Gary
10 Poindexter, and Bob Randall from William V. Culver dated
11 August 21, 1972, with a two-page attachment.

12 (The document referred to
13 was marked Exhibit 1195 for
14 identification.)

15 Do you need to review Exhibit 1195?

16 A. Yes. Or 1194.

17 Q. 1194?

18 A. That's what I have.

19 (Document proffered to the witness.)

20 1195. Thank you.

21 Q. Have you had an opportunity to review Exhibit
22 1195?

1 A. Yes.

2 Q. Have you seen Exhibit 1195 prior to today?

3 A. I don't recall it.

4 Q. Do you recall seeing a copy of the attachment to
5 1195 prior to today?

6 A. Not really.

7 Q. Do you recall talking with anyone at Grace about
8 the substance of what is discussed in the attachment to
9 Exhibit 1195?

10 A. I don't have a specific recollection of that
11 discussion.

12 Q. The first sentence in Exhibit 1195 says, "The
13 attached sounds much easier to live with than indications
14 we have had in the past of what might transpire." Do you
15 see that?

16 A. I see that.

17 Q. Do you have an understanding of what you meant by
18 that phrase, or sentence?

19 A. No. Except that -- no, I don't.

20 Q. The last sentence in the first paragraph to the
21 attachment to Exhibit 1195 says, "Accordingly, our best
22 estimate for the discontinued production of MK-3 is around

1 January 1, 1973. Do you see that?

2 A. I see that.

3 Q. Were you still in charge of, or responsible for,
4 the production plants in Portland and Auburn with respect
5 to the production of MK-3 in August of 1972, to the best
6 of your recollection?

7 A. I don't recall the date that I ceased having
8 responsibility.

9 Q. There's some handwriting in the right -- I mean,
10 excuse me, the left-hand upper portion of the page next to
11 the names. Is that your handwriting?

12 A. No.

13 Q. Was it your understanding in August of '72 that
14 there would be a discontinuation of the production of MK-3
15 around January, 1973, as a result of EPA regulations?

16 A. I only understand what it says here.

17 Q. The letter also discusses a waiver procedure. Do
18 you see that?

19 A. I see that.

20 Q. Does that refresh your recollection of the
21 existence of a waiver procedure?

22 A. I only know what it says here.

1 Q. So it doesn't refresh your recollection?

2 A. No.

3 Q. The next to the last paragraph of Exhibit 1195,
4 the attachment to Exhibit 1195, says, "The basis for such
5 a request should be the need for additional time to bring
6 the product into compliance. It would also be useful to
7 indicate that this time is needed to use up most of the
8 existing inventory and to run through existing contracts.
9 Do you see that?

10 A. Yep, I see that.

11 Q. Was it your understanding in 1972 that part of
12 your responsibilities was to continue to sell MK-3 as much
13 as you possibly could until the EPA banned the product?

14 A. I understood my responsibilities, to sell as much
15 Mono-Kote III as I could until it was no longer allowed.

16 Q. Was it your understanding that one of your
17 responsibilities was to keep as much inventory of Mono-
18 Kote III as you possibly could up until the time of the
19 EPA ban?

20 A. No.

21 Q. Wasn't it true that it was your understanding
22 that W. R. Grace was attempting to stockpile as much MK-3

1 as it possibly could prior to the ban, knowing that there
2 was a ninety-day window period in which that stockpile
3 could be used?

4 A. No.

5 Q. There was an understanding in August of 1972 that
6 the EPA was going to require the discontinuation of
7 production of Mono-Kote III around January 1, 1973. Why
8 didn't you stop producing MK-3 in August of 1972, prior to
9 the promulgation of the regulations?

10 MR. REPERT: Objection. No foundation.

11 THE WITNESS: I think the letter says, "according
12 to our best estimate." This is nothing but an estimate.

13 BY MR. BOUCHER: (Resuming)

14 Q. Wasn't it your understanding that one of the
15 reasons why the EPA was going to ban the use of spray-on
16 asbestos fireproofing products, including the use of
17 Mono-Kote III, was that there was a potential health
18 hazard to those individuals who used Mono-Kote III?

19 MR. REPERT: Objection. No foundation
20 whatsoever for that.

21 THE WITNESS: I have no knowledge of that.

22 MR. BOUCHER: So you had no understanding at all

1 as to why the EPA was going to ban the use of Mono-Kote
2 III?

3 MR. REPERT: Objection. You asked that at some
4 length earlier in the deposition EPA's action, and what he
5 understood the reasons were for that. And he answered all
6 those questions to the best of his ability. You're going
7 over old ground. It's getting to the end of the day.

8 BY MR. BOUCHER: (Resuming)

9 Q. Is that correct?

10 A. Restate your question.

11 Q. In 1972 you had no understanding that one of the
12 reasons why the EPA was going to ban the use of Mono-Kote
13 III was the fact that it contained asbestos. Is that
14 correct?

15 A. No.

16 Q. No, that's not correct?

17 A. No, that's not correct.

18 Q. Okay. And what was your understanding at that
19 time?

20 MR. REPERT: Objection. Asked and answered.

21 THE WITNESS: My understanding of the ban of the
22 EPA was to ban all materials that contained more than one

1 percent asbestos.

2 BY MR. BOUCHER: (Resuming)

3 Q. Because of the potential health hazard associated
4 with the use of those materials. Right?

5 A. No.

6 MR. REPPERT: Objection.

7 BY MR. BOUCHER: (Resuming)

8 Q. You had absolutely no understanding of why?

9 A. They banned it because the spraying of more than
10 one percent asbestos is what the ban was.

11 Q. Let me hand you what we'll have marked Exhibit
12 1196. It is a May 24, 1973 letter to "Gentlemen," from
13 William V. Culver.

14 (The document referred to
15 was marked Exhibit 1196 for
16 identification.)

17 Have you had an opportunity to review Exhibit
18 1196?

19 A. Yes, I have.

20 Q. Have you seen Exhibit 1196 prior to today?

21 A. I don't recall it. Not specifically.

22 Q. The first paragraph of Exhibit 1196 indicates,

1 "In accordance with the bulletin dated April 17, 1973,
2 regarding the EPA 'National Emissions Standards for
3 Hazardous Air Pollutants', all stocks of MK-3 should be
4 used prior to July 4, 1973." Do you see that?

5 A. I see that.

6 Q. Having reviewed Exhibit 1196, does it refresh
7 your recollection that the reason why the EPA banned the
8 use of Mono-Kote III was that it contained hazardous air
9 pollutants, namely asbestos?

10 MR. REPERT: Objection.

11 THE WITNESS: No, that it contained more than one
12 percent asbestos.

13 BY MR. BOUCHER: (Resuming)

14 Q. And that asbestos in more than one percent was a
15 hazardous air pollutant.

16 MR. REPERT: Objection.

17 BY MR. BOUCHER: (Resuming)

18 Q. Was that your understanding?

19 MR. REPERT: Objection. No foundation. That's
20 completely off base.

21 You may attempt to answer.

22 THE WITNESS: I may?

1 MR. REPPERT: You may if you can.

2 There's no foundation in the record that the
3 title "hazardous air pollutants" applies to Mono-Kote.

4 And you may answer the question.

5 THE WITNESS: The ban was on spraying any
6 materials containing in excess of one percent asbestos.
7 And I don't know what level of asbestos was hazardous.

8 BY MR. BOUCHER: (Resuming)

9 Q. Okay. The next paragraph says, "Please arrange
10 to have any warehouse stocks shipped to one of your
11 customers in time for use of the material prior to the
12 above date." Do you see that?

13 A. I see that.

14 Q. Why did you want to get stocks of MK-3 out to the
15 customers prior to the July 4, 1973 cutoff date?

16 MR. REPPERT: Objection. It misstates the --
17 mis-paraphrases the sentence. It says, "[I]n time for use
18 of the material prior to the above date."

19 THE WITNESS: And it goes on to say that we will
20 be unable to accept any MK-3 returned for credit. So it
21 is acceptable to use it up until that date. After that
22 date, it's not acceptable to use it.

1 BY MR. BOUCHER: (Resuming)

2 Q. Didn't you feel that there was something immoral
3 about selling off stocks of MK-3 products when they were
4 banned by the EPA?

5 MR. REPERT: Objection. That's a --

6 MR. BOUCHER: And as hazardous materials?

7 MR. REPERT: Objection. The question is
8 factually erroneous, and there's no foundation.

9 BY MR. BOUCHER: (Resuming)

10 Q. You may answer the question.

11 MR. REPERT: There's no foundation for the
12 question.

13 THE WITNESS: There was no evidence whatsoever
14 given to us that the use of MK-3 was hazardous.

15 BY MR. BOUCHER: (Resuming)

16 Q. Well, wasn't the fact that the EPA was banning
17 its use evidence that it's hazardous, to you?

18 A. No. And if I had felt it was hazardous, I
19 wouldn't have done it.

20 Q. What is your present business address, sir?

21 A. P.O. Box A, Auburn, Washington.

22 Q. What is the street?

1 A. 102 C Street South West.

2 Q. In Auburn?

3 A. Auburn.

4 Q. What is your present home address?

5 A. 141 Parfitt Way, Winslow.

6 Q. Do you have any plans for being out of the
7 country in February of 1989?

8 A. No.

9 MR. REPPERT: Isn't California out of the
10 country?

11 BY MR. BOUCHER: (Resuming)

12 Q. Do you have any present intention to be in Los
13 Angeles, California during the trial on this matter?

14 A. Between when?

15 Q. In Los Angeles, California during the trial of
16 this case.

17 A. I'm available whenever W. R. Grace wants me.

18 Q. Has anyone from W. R. Grace indicated to you that
19 they intend to call you as a witness during the trial of
20 this matter?

21 MR. REPPERT: To the extent that answering that
22 requires you to disclose any attorney/client

1 communication, you are instructed not to answer.

2 THE WITNESS: I'm not going to answer.

3 MR. BOUCHER: Okay. You have answered.

4 Mr. Culver, I have no further questions for you
5 at this time. Thank you very much.

6 MR. HENDERSON: I have no questions.

7 MR. REPERT: Mr. Culver, I have a couple of
8 questions.

9 EXAMINATION BY COUNSEL FOR DEFENDANT W. R. GRACE

10 BY MR. REPERT:

11 Q. Earlier in the deposition you testified about
12 MK-3 cracking. What is your understanding of what
13 occasions led to cracking in MK-3? What occasioned the
14 cracking of MK-3?

15 MR. BOUCHER: Objection. Calls for speculation.

16 THE WITNESS: The application of fireproofing
17 requires some significant expertise, and the cracking
18 which we experienced was by one applicator, principally,
19 who I believe applied it too thick at a time, and too much
20 water.

21 BY MR. REPERT: (Resuming)

22 Q. Did Grace provide any instructions to applicators

1 of MK-3?

2 A. There have always been printed application
3 instructions available and distributed to our applicators.

4 Q. Do you know of any cracking problems with MK-3
5 where the product was properly applied?

6 A. I'm not aware of any where -- properly applied.

7 Q. What inventory capacity was there at Grace plants
8 in Portland and Spokane for MK-3?

9 A. I would estimate that the total capacity of
10 inventory -- warehouse capacity of both plants was in the
11 order of four or five days of shipment. We had no more
12 capacity than that, nor did we hire any outside storage or
13 warehousing. Nor did we have any significant inventories
14 among our customers.

15 Q. I direct your attention to Exhibit 1191. You may
16 recall that before Plaintiffs' counsel showed you that he
17 actually ripped off the attachment so you wouldn't have a
18 chance to see it. The first sentence says, "Attached is
19 some correspondence between Wes Snowden, the author of the
20 report 'Evaluation for Presence of Asbestos Particles in
21 an Office Building Ventilation System' which I sent you on
22 December 11." Do you have any knowledge as to what that

1 report was?

2 MR. BOUCHER: I would object to the editorial
3 comments of counsel, the unprofessional comments of
4 counsel, the self-serving comments of counsel, which
5 provided an introduction to that question. I would move
6 to strike the comments of counsel from the record, and
7 also object to the question as being leading, to be
8 calling for speculation, and having no foundation. It
9 assumes facts not in evidence.

10 BY MR. REPERT: (Resuming)

11 Q. You may answer.

12 A. Wes Snowden worked for Valentine, Fisher &
13 Tomlinson. And for reasons best known by him and his
14 firm, they conducted a sampling of the return air plenum
15 contents on a building called Plaza 600. And the report
16 that's referenced here indicated that there was no
17 asbestos that they could find in any of the return air
18 plenum or filters in there.

19 Q. And what product was in the building?

20 A. That was Mono-Kote III.

21 MR. REPERT: No further questions.

22 MR. BOUCHER: Move to strike the witness'

1 testimony on the last question as being speculative and
2 having no foundation.

3 FURTHER EXAMINATION BY COUNSEL FOR PLAINTIFFS

4 BY MR. BOUCHER: (Resuming)

5 Q. Mr. Culver, during the time that you provided
6 written information to applicators on the use and
7 application of Mono-Kote III did you also provide them
8 with any warnings of the dangers associated with the use
9 of Mono-Kote III from the fact that it contained asbestos?

10 MR. REPERT: Objection. There's no foundation
11 that there were any dangers associated with the use of
12 Mono-Kote III. On the contrary, there is no such evidence
13 of record.

14 THE WITNESS: I'm unaware of any.

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1 CERTIFICATE OF REPORTER

2 STATE OF WASHINGTON) ss.:

3 County of King)

4 I, Allan M. Johnson, the officer before whom
5 the foregoing deposition was taken, do hereby certify
6 that the witness whose testimony appears in the foregoing
7 deposition was duly sworn by me; that the testimony of
8 said witness was taken by Allan M. Johnson, Stenomask
9 Reporter, and thereafter reduced to typewriting under my
10 direction; that I am neither counsel for, related to, nor
11 employed by any of the parties to the action in which
12 this deposition was taken, and further that I am not a
13 relative or employee of any attorney or counsel employed
14 by the parties thereto, nor financially or otherwise
15 interested in the outcome of the action.

16
17 *Allan M. Johnson, C.R.*18 Notary Public in and for the State
19 of Washington, County of King

20 My Commission expires March 15, 1991.



FILE CO



208 SOUTH LA SALLE STREET

TELEPHONE DEARBORN 2-0121

CHICAGO 4, ILLINOIS

September 19, 1961

G3842AH

To the Members of
Plaster Committee

A. W. Dambros, Chairman
W. V. Culver
D. L. Larson
J. B. Lyall, Jr.
C. A. Pratt
D. L. Prouty

Re: Minutes of August 14, 1961 Meeting

Gentlemen:

I am attaching copy of the minutes of your last meeting. If you have changes to suggest to them, please advise.

The following persons' attention is especially called to the items noted opposite their names:

D. J. Boone	Item 13
A. W. Dambros	Item 4
C. T. Grimm	Items 1(d) and 12
D. L. Larson	Items 1(a), 2(a)(c), 5(b) and 12
E. L. Perrine	Items 1(b), 3, 5(b) and 12

Sincerely,

Edward R. Murphy

Executive Secretary

ERM:ak

Enc.

P.S. Note to MDC members - See item 14.

cc: Market Development
Board of Directors
J. H. Bishop
C. T. Grimm

0000 1

Exhibit # 1173
Culver

12/12/86

3842B

MINUTES OF MEETING
PLASTER COMMITTEE
VERMICULITE INSTITUTE
August 14, 1961

A meeting of the Plaster Committee was held August 14, 1961 at the Union League Club, Chicago, Ill.

The following members were present:

A. W. Dambros, Chairman
W. V. Culver
C. A. Pratt
D. L. Prouty

Also present were Messrs. R. J. Bragg, C. T. Grimm, D. L. Larson, E. L. Ferrine, D. J. Boone and E. R. Murphy, Secretary.

The minutes of the meeting of the Committee, held at Chandler, Ariz. on March 22, 1961, were reviewed and approved as written.

(1) Review of Fire Test Program - Type-MK Fireproofing

(a) Four Floor and Beam Tests

The Committee reviewed the results obtained on the first three floor tests. They also evaluated the result on the fourth floor test to be made some time this fall. A 3-hour rating is anticipated. This floor consists of RK units with 5/8" of Type MK-3 material following the contour and 3/4" of material across the top of the flutes.

Mr. Culver explained that in his area there is a specific need for a 2-hour rated floor of the RK type. He asked that consideration be given to making another fire test on an RK floor to obtain this rating. The Committee agreed to give this request further thought after we have the result of the fourth test.

The Committee requested the Secretary to send a letter of commendation to the Zonolite Research Laboratory and to Don Larson of V.I. for the work done by them in formulating, checking, batching and testing Type MK-3 material. The Committee was particularly impressed with the speed with which this was done in order to meet our test schedule at UL, Inc., Chicago.

(b) Test Report on Third Test

The Secretary recommended that we do not have copies of the report on the third test made and, likewise, that the result of that test be not listed in the UL list. This floor construction was composed of a blend system with flutes filled and 3/4" of Type MK-3 below. The end-point was reached at 2 hours, 58 minutes, and only a 2-hour rating would be assigned to the floor. This would conflict with the 3-hour rating for a blend system floor with 7/8" of Type MK-1 following the contour. The Secretary also advised that this matter had been discussed by the MCC and that they recommended to the Plaster Committee that no test report be issued. The Plaster Committee concurred.

The drop-offs that have been occurring in fire tests on the flat plate of blend system floors was discussed. The Institute office was asked to discuss this matter further with several manufacturers of steel decks, stressing the need for a surface providing better adhesion for fireproofing material. The Zonolite Laboratory was also asked to check this to see if they could make some recommendations to improve adhesion.

(c) Equality of Type MK-1 and MK-3

Consideration was given to the acceptance by building officials, fire insurance rating bureaus and others to the equality of Type MK-1 and MK-3 fireproofing materials, i.e., the results of fire tests with one material may be applied to the other.

Two of the floor constructions (one on a blend system, and the other consisting of RK units) were tested with Type MK-1. We are assuming that Type MK-3 will be permitted for the same fire ratings. This matter will be tested before the Research Committee of the International Conference of Building Officials in connection with our request for approval. If they are willing to accept the two materials on an equal basis, we will then have a better idea of what to expect from other building official organizations.

(d) Yield of Type MK-3

Several members of the Committee stated that they were not able to get the yield with Type MK-3 that other producers indicated they were obtaining in their areas. The Committee requested Mr. Grimm to make a survey of companies producing Type MK-3 material to determine their yields and report to the Committee.

(e) UL Acceptance of New Deck Sections

Mr. Larson reported that he had discussed with the Underwriters Laboratories their acceptance of steel decks with different cross sections, which have become available recently, for those used in fire tests, with, of course, the same fire ratings. UL advised him that H. H. Robertson had already requested equivalency for their new Type MKX and Section 21 units for those actually employed in their fire tests. In turn, the Underwriters requested H. H. Robertson Co. to make two new tests employing the new floor sections. One test is suggested with two flute units and one flat plate unit, alternating, and the other, with a flute and a flat plate unit alternating.

The Institute was requested to contact H. H. Robertson Co. and agree to supply MK-3 material for these new tests, if they are going to make them. Likewise, offer any data that we have that would be of assistance.

(2) Discussion of New Fire Tests

(a) Column Test with Type MK Fireproofing

Previous to the meeting, the members had been canvassed to obtain their opinion as to the advisability of making a fire test on a column protected

with Type MK-3, following the contour of a column. The majority had replied in the affirmative.

The Secretary advised that he had referred the result of the canvass to the Market Development Committee at their meeting in July and that they had approved the making of such a test, but had referred back to the Committee the question as to the proper thickness to employ for a 4-hour rating. The Secretary also stated that on the recommendation of the MDC, the Board of Directors had made an appropriation of \$2,000 for this purpose.

It was the consensus of opinion of the Committee that we should attempt to obtain a 4-hour fire rating and that 2-1/2" of Type MK material be employed.

(b) Metal Lath Ceiling with the New Acoustical Material Direct to Metal Lath

Mr. Bragg discussed his report No. 575 covering the application of the new acoustical material direct to metal lath. He stated that while the experiments run in the lab appear satisfactory, it should be understood that they used relatively small pieces of metal lath. He therefore suggested field trials of this combination of materials on full-sized ceilings before reaching a definite conclusion.

Until more information is available on the practicality of this ceiling, it was decided that no fire test should be considered.

(c) Concrete Slab-Joist Floor Protected with Type MK

Chairman Dambros stated that on the West Coast a slab-joist concrete floor, for a 2-hour rating, has to have a slab 4-1/2" thick. He suggested the possibility of obtaining a 2-hour rating with such a floor system with a 2-1/2" slab with 3/4" of Type MK applied to its underside (Type MK not to be applied to the joists). He presented cost figures (West Coast) to show a savings by the use of Type MK and a reduction in concrete slab thickness.

It was decided that representatives of the Institute and Zonolite Research Lab should contact Portland Cement Assn. to obtain their reaction to this idea. Also, that we explore the possibility of a joint fire test, such a test to be made either at the Underwriters Laboratories or at the Portland Cement Assn.'s fire test laboratory.

The Committee further recommended that after we had a specific test to discuss, a recommendation should be made to the Market Development Committee for sufficient funds to pay for a fire test or our share of such a test on the construction noted.

3842E

(d) Fire Tests on Steel Column Protected with Metal Lath and Plaster Employing Coated Aggregate

An application was made for another test on a column protected with a metal lath cage and vermiculite plaster using coated aggregate. The Committee recommended that the coated aggregate employed be obtained from Dearborn, Mich. Mr. Prouty agreed to provide the aggregate, check to see that its density is in the 6 lb. range and to provide a sample for the Zonolite Lab to check screen analysis.

(3) New Fireproofing Material

The Chairman reminded the Committee that the MDC, at their meeting in December 1960, requested, in addition to Type MK-3 material, that there should be continued effort to try to develop, if possible, a better and more economical fireproofing material.

Mr. Perrine stated that some consideration had been given to another type fireproofing, but that no work had actually been done by the Laboratory. The Committee requested Mr. Perrine to re-activate work on this material.

(4) Vermiculite Acoustical Tile - Fire-Rated Material

At the present time, according to Mr. Dambros, the few companies having fire-rated tiles are getting a premium for them which permits us to be competitive with Type MK. He pointed out, however, that as more tile companies obtain fire-rated material, we will have serious competition. Mr. Dambros recommended that the industry begin research to determine whether a vermiculite tile can be produced that will be competitive.

The Committee requested the Chairman to convey this information to the Zonolite Co. and urgently recommend investigation of the manufacture of a vermiculite tile capable of competing with the tiles mentioned.

(5) Underwriters Laboratories, Inc.

(a) New Specifications for Vermiculite Plaster Aggregate

The Secretary discussed the new specifications for our plaster aggregate, issued by the Underwriters Laboratories, which were sent to all of our members, subscribing to re-examination service, for their approval.

Reference was made to the Secretary's letter to Mr. Bono of Underwriters Laboratories, dated July 11, commenting on the new specification and requesting certain changes to be made. The Secretary also stated that he had had additional conversation with Mr. Zimmer of UL with respect to our recommendations, and that he would discuss it further with Mr. Parks of UL.

(b) Listing of Density of Fireproofing Materials

Mr. Larson reported on contacts made with UL regarding the reporting of in-place density of fireproofings tested by that organization. He stated that they agree with our suggestion that this should be done, but have not been able to devise a simple method of checking, particularly one that can be reproduced in the field.

It was further reported that Zonolite Laboratory had loaned UL a penetrometer (used for checking concrete) to determine whether this could be used as a basis for penetration and density tests. The penetrometer was not satisfactory, but the Zonolite Lab recently added a special disk to it, which they felt would make it suitable for the purpose, and have returned it to UL for another trial.

(5) Minimum Weight Shown on Plaster Bags

Mr. R. W. Sterrett wrote to Mr. Dambros on July 27, requesting the Committee's consideration of changing the minimum weight shown on 4 cu.ft. plaster bags from "Net Weight, 28 lbs." to "Net Weight, 24 lbs." The Committee concurred with this change, since the minimum weight or density for such aggregate is now 6 lbs.

The Secretary was requested to advise all members of this change.

(6) Acoustical - Generic Term for "Zono-Coustic"

The Secretary called attention to the need for a generic term for Zono-Coustic. He suggested that the Institute use the term, "Vermiculite Acoustic - Type 2." The Committee approved of this term.

(7) ASA Standard Specifications for Gypsum Plastering

The Secretary reported that a trial ballot had been taken by the Secretary of ASA Committee A42 on the controversial changes and additions recommended to this Standard, the main purpose being to determine whether some of the items could be resolved so that only the most controversial items would have to be considered at the next meeting of the Committee. The voting was not conclusive.

The Secretary referred to the possibility of obtaining unanimity of opinion on several of these items of special interest to us at the next meeting of the ASA Committee. In view of this, he recommended that we withhold publication of our revised plastering specification. The Committee concurred with this recommendation.

Mr. Bragg suggested that the following be added to the section on "Temperature and Ventilation," in our specifications, applying to areas of buildings lacking openings for natural ventilation:

"This may be accomplished by circulating exterior air through the enclosed area and exhausting it to the exterior under forced draft."

The Secretary advised that he would include appropriate provision for this in our revised specifications.

(8) Bloc-Kote

The Committee was informed that the Market Development Committee had discussed this material at their meeting in July and felt that more field work should be done with it from which adequate specifications could be prepared. The Committee concurred with this suggestion.

(9) Texture Finish Over Gypsum Wallboard

Mr. Bragg discussed this product and indicated that they had revised the formula to whiten it. Also, that samples of the new material had been sent to a number of areas for field testing.

(10) Plastering Over Polystyrene

F. Hyde & Co. had called attention to the fact that in Eastern Canada vermiculite plaster was being applied to this base, with a mesh reinforcing over it, with successful results. They stated that they had not recommended or promoted this practice. They requested the opinion of the Committee as to whether

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Mr. Larson distributed copies of the revised proposed specifications for vermiculite sprayed insulation to the Committee for review. The Chairman asked the members to check the specifications and submit comments by Sept. 1, 1961.

(13) Promotional Campaign - Plaster, Acoustical and Fireproofing Products

Mr. Boone submitted a letter to the Plaster Committee, dated Aug. 8, 1961, outlining a promotional campaign for these products, which had been discussed and approved by the MDC in July with the understanding that the details were to be approved by the Plaster Committee. He presented details, including advertising, publicity and literature. He also stated that a sound-slide film on fireproofing, based on slides obtained by the Zonolite Co. and H. W. Steiff, may be prepared. The program would extend from November 1961 through February 1962.

The Committee concurred with the campaign as outlined and commended Mr. Boone for his efforts.

(14) 1962 Annual Meeting

Since it is probable that the Plaster Committee will not meet again during this fiscal year, the Committee gave consideration to the Plaster part of the annual meeting program, in addition to the usual report of the Committee Chairman. As a result, the Committee recommended to the Market Development Committee that a contest for salesman be established to determine the Best Idea in Selling Type MK Fireproofing in Competition.



Edward R. Murphy

Executive Secretary

ERM:ak

they should go on record as recommending this combination of materials.

It was the opinion of the Committee that the industry should not recommend the use of our plaster over polystyrene, even with the mesh reinforcing.

(11) Quality Control Standards

Several years ago, the Institute issued to its members a quality control standard for the production of acoustical plastic, which standard has been revised at least once. It was the consensus of opinion that this standard should be reviewed again to determine if additional changes should be made, and also that comparable quality control standards should be prepared for Type MK fireproofing and for vermiculite sprayed insulation.

(12) Vermiculite Sprayed Insulation

Mr. Grimm discussed the contacts he had had with Behlen Co., manufacturers of steel buildings, regarding the fireproofing of the ceilings of their buildings with vermiculite sprayed insulation. He stated that that company is going to make a full-scale test at the Underwriters Laboratories on a ceiling section protected with our material to obtain a 1-hour rating. Also, that Mr. Perrine is conferring with representatives of the Behlen Co. with respect to the construction of the test panel.

In connection with wall construction, Mr. Grimm advised that Western Actuarial Bureau said that only the supports for walls (columns), had to be protected; also, that a 2-hour rating is required.

Behlen Co. are not interested in such a test. It is felt that other steel building manufacturers might be, such as Inland Steel Co., Stran-Steel, Butler, etc.

The savings in fire insurance rates by having 2-hour fire-rated wall supports was discussed. Mr. Grimm was asked to obtain detailed information from Western Actuarial Bureau on the actual savings for both the building and contents. This information is to be sent to members of the Plaster Committee, Market Development Committee and the Secretary.

The Committee recommended that a fire test be made on a wall support (column) with vermiculite sprayed insulation. It was further recommended that the cost of making such a test should be borne by the steel company involved and the vermiculite industry, or by our industry alone.

The column to be used and the thickness of protection is to be determined by a special task group, consisting of a representative of the Institute, the Zonolite Co. and the metal building manufacturer involved, after consultation with the Underwriters Laboratories and Western Actuarial Bureau. An opinion is to be obtained from the Underwriters as to whether they will grant the fire rating obtained on the column tested to other comparable columns.



ZONOLITE

DIVISION W. R. GRACE & CO.

RESEARCH LABORATORY
1827 BENSON AVENUE
EVANSTON, ILLINOIS

MINERS AND MANUFACTURERS OF VERMICULITE PRODUCTS

March 25, 1964

MAR 30 1964

Mr. W. V. Culver
VERMICULITE NORTHWEST, INC.
2107 N. 34th St.
Seattle 3, Washington

Dear Bill:

Enclosed are three copies of Test Report No. 1072, "Wet
Bulking & Light Reflectivity of 7EX3 Asbestos Fiber from
California Zonolite Co."

Very truly yours,

ZONOLITE DIVISION
W. R. GRACE & CO.

E. L. Perrine

E. L. Perrine
Manager
Evanston Laboratory

ELP:ej
enc.

cc: J. Huxley
R. W. Sterrett
J. A. Kelley
A. MacArthur

Exhibit 1174
Culver 12/12/68 AAS

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ZONOLITE DIVISION

W. R. GRACE & CO.

RESEARCH LABORATORY

1627 BENSON AVENUE • EVANSTON, ILLINOIS
TELEPHONE DAVIS 6-8660

WET BULKING & LIGHT REFLECTIVITY OF 7EX3 ASBESTOS FIBER FROM CALIFORNIA ZONOLITE CO.

March 23, 1964

Test Report No. 1072

Laboratory Data Book No. 80, Page 5

Work done by: W. R. Payment

Work requested by: W. V. Culver, Vermiculite Northwest
J. Huxley, California Zonolite

Purpose of Test: To determine the above two properties of
7EX3 asbestos fiber.

Abstract: Wet bulking value is acceptable, but light reflectivity is one point below the acceptable .58 standard. It is entirely possible that the color of this fiber will not be detrimental in Mono-Kote, whereas it will affect the color of White Acoustical Plastic.

Procedure: Standard wet bulking (10 grams sample in 250 cc. distilled H₂O, using 10 inversions and allowing mixture to stand 60 minutes). Value reported represents volume of the original 250 cc containing asbestos.

Light reflectivity values were determined with a Model 610 Photovolt Reflectometer, using green filter and glass slide over the sample. The green filter corrects the response of the meter to that of the human eye.

Data:

<u>Sample</u>	<u>Producer</u>	<u>Wet Bulk Value</u>	<u>Light Reflectivity</u>
7EX3	Jefferson Lake Asbestos Corp.	216	.57

Respectfully submitted,

Walter L. Payment
W. R. Payment

Approved:

E. L. Perrine
Manager
Evanston Laboratory



ZONOLITE DIVISION

W. R. GRACE & CO.

RESEARCH LABORATORY

1827 BENSON AVENUE EVANSTON, ILLINOIS
TELEPHONE DAVIS 8-6660

WET BULKING & LIGHT REFLECTIVITY OF 7EX3 ASBESTOS FIBER FROM CALIFORNIA ZONOLITE CO.

March 23, 1964

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Respectfully submitted,

Walter L. Payment
W. R. Payment

Approved:

E. L. Perrine
E. L. Perrine
Manager
Evanston Laboratory



770232

208 S. LASALLE STREET • CHICAGO, ILLINOIS 60604 • DEARBORN
December 23, 1964

To the Members of the
Market Development Committee:

C. H. Wendel, Chairman
D. J. Boone
W. V. Culver
J. A. Kelley
L. G. McDermold
R. B. Moran
E. L. Perrine
H. W. Steiff

Re: Minutes, November 30-December 1, 1964 Meeting

Gentlemen:

Merry Christmas.

I am attaching copy of the minutes of your Nov. 30-Dec. 1, 1964 meeting. Will the persons mentioned below please refer to the pages and items shown opposite their name, since further action is required.

- (1) Market Development Committee and Board of Directors -
Page 1, Item 2, Annual Meeting Program.
- (2) Andy Wise - Page 2 - Meeting of Agricultural Committee.
- (3) Roy Babb - Page 11, Item 7.
- (4) Dan Boone - Page 3, Item 2.
- (5) Les Barron - Page 3, Item 1; Page 4, Item 2; Page 5, Item 5; Page 9, Item 5; Page 12, Item 10; and Page 12, Item 12.
- (6) Joe Kelley - Page 6, Items 9 and 10.
- (7) Gene Perrine - Page 3, Item 1; Page 6, Item 8; Page 8, Item 1(a); Page 10, Item 2; Page 12, Item 9.

Happy New Year.

Sincerely,

Edward R. Murphy
Executive Secretary

ERM:dc

Exhibit 1175
Culver 12/2 AMJ

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cc: Board of Directors
Chairmen of Committees
J. H. Bishop
R. W. Sterrett

MINUTES OF MEETINGMARKET DEVELOPMENT COMMITTEEVERMICULITE INSTITUTENovember 30 - December 1, 1964

A meeting of the Market Development Committee was held at the Union League Club, Chicago, Illinois, on November 30 and December 1, 1964. The following persons were present:

C. H. Wendel, Chairman

D. J. Boone

W. V. Culver

J. A. Kelley

R. B. Moran

H. W. Stelff

The members of the Board of Directors were also present, namely: Messrs. D. J. Boone, W. V. Culver, J. H. Greer, J. G. Ordway and H. K. Sterrett.

Also present were Messrs. L. A. Barron, E. L. Perrine and E. R. Murphy, Secretary.

The minutes of the last meeting of the Committee, held at the Union League Club, Chicago, Illinois, on June 1-2, 1964, were approved as written.

GENERAL(1) Sales Management Seminar

The Committee was reminded that the September, 1964 Seminar had to be cancelled because not enough people indicated that they would attend it. The Secretary recommended that we give more consideration to the timing when we decide to hold the next meeting, so that a number of persons who might normally attend are not tied up with company programs. He also stated that Prof. Clewett has proposed the months of either February or March or, if these are not satisfactory, the month of June, 1965.

The Committee agreed that a 1965 Seminar should be held and that June would be the best time to hold it. The Secretary was therefore requested to contact Prof. Clewett to confirm the time. He was also directed to obtain copy of the proposed outline of the Seminar, containing the subjects and subheadings that are to be covered, for review by the Market Development Committee before it is finalized.

(2) Program for 1965 V.I. Annual Meeting

The Secretary presented a draft of a proposed program for this meeting, which was considered, and a number of changes made. It was understood that the revised second draft of the program would be sent to the members of the Market Development Committee and the Board of Directors for comment and finalizing. It was also understood that copy of this second draft would be sent to the Chairmen of the various Committees.

(3) F. Hyde & Co., Ltd. - Insulative Tests

The Committee considered a letter from Mr. Charles Goyer of F. Hyde & Co., Limited, dated September 10, 1964, requesting that the Institute make and pay for calorimeter and wind-uplift tests on vermiculite-asphalt insulation at Factory Mutual Insurance Co., Norwood, Mass. Previous tests made by F. Hyde & Co., Ltd. at that laboratory were not successful insofar as wind-uplift was concerned.

It was the consensus of opinion of the Committee that tests on this material fall in the same category as other tests we've conducted in which information and results are particularly useful to one or a very few of our members. In such cases, the Institute has agreed to pay a certain amount and the company or companies involved have agreed to pay the remainder.

It was estimated that the total cost for these tests, including material, would be \$1,850. The Committee therefore recommended to the Board of Directors that V.I. pay not to exceed \$1,000 of this amount if F. Hyde & Co., Ltd. is willing to pay the remainder.

AGRICULTURAL AND INDUSTRIAL

Mr. Culver read and discussed Chairman Wise's report to the Committee dated November 18. He emphasized the benefits and importance to the industry of bulk handling of vermiculite. There was discussion on this matter; the Cornell mix, using #2 or #4 size material; Spencer Chemical Co.'s use of vermiculite in Arkansas and Tennessee without the use of a polyethylene film; and the use of seed encapsulated with vermiculite for growing lettuce at Salinas, Calif.

The Committee noted that the Agricultural and Industrial Committee had not met to-date, and requested the Secretary to suggest to Mr. Wise that a meeting of the Committee be held at Travelers Rest on April 22-23, 1965. The Committee also requested that the following subjects be submitted to Mr. Wise for consideration at that meeting:

- (1) Need to determine, if possible, a heavier carrier to compete with Atacley on a weight basis.
- (2) Liquid phase of commercial, high analysis, high nitrogen fertilizer products.
 - (a) More tests run to determine definitely whether vermiculite is an answer to this problem.
 - (b) A market study to determine the potential use if vermiculite is found to be satisfactory.
- (3) Cornell Mix
 - (a) That tests be made in various parts of the country and results reported at V.I. annual meeting. Also, advise them of products employed and mixing procedure.
 - (b) In connection with (a), it was felt that members of the Agricultural Committee should be asked to get the product tried out in their areas.

(c) Investigate the use of this mix by the home gardeners as well as growers (for lawns and flower beds).

(d) Contacts with Garden Clubs?

It was recommended that Prof. Sheldrake of Cornell University be requested to appear on our program to discuss the Cornell mix.

Mr. John Hilkin of Zonolite Div.-W. R. Grace & Co. appeared before the Committee to recommend the Institute's participation in a radio publicity program sponsored by the Netherlands Flower Bulb Institute, National Plant Food Institute, Clay Pot Manufacturers' Assn. and Lawn Mower Institute. According to the program, there will be one 5-minute show devoted to vermiculite, as well as reference to vermiculite in other parts of the broadcast. 300 radio stations are involved at a cost of \$2.50 per station, or a total of \$1,250. The number of radio stations may exceed this number.

It was the opinion of the Committee that the Institute should participate to the extent of \$1,250, and that the members of V.I. be asked to reimburse the Institute at \$2.50 per station located in their areas. If a member is not willing to do this the Institute will absorb the cost. The Committee requested the Board of Directors to approve an appropriation of \$1,250 for this purpose.

INSULATION COMMITTEE

Chairman Upchurch's report dated November 16, 1964, was read and discussed by Mr. Harvey Steiff, the M.D.C. representative on that Committee. Mr. Steiff emphasized that the Committee had decided at their meeting on November 11, 1964, to include the following in their part of the V.I. annual meeting program: report on the actual savings in heating and air-conditioning in structures using electric heat, insulated with vermiculite; presentations on this subject from persons representing various parts of the United States and Canada. The acceptance of masonry fill by concrete block producers, including a southern block manufacturer as guest speaker. Also, if possible, a guest speaker from an electrical power company located in Alabama or Georgia.

Mr. Steiff also stated that the Insulation Committee recommended a number of ways in which to sustain and increase the sale of vermiculite loose-fill insulation over the year by working at the dealer level and using the re-insulation theme, the 3-cubic foot bag, and emphasizing sales to new markets - such as farm buildings, mushroom houses, existing institutional and commercial buildings.

(1) Conductivity Tests on Loose-Fill and Masonry Fill - Density Range of Loose-Fill

Mr. Barron reported on tests made at J. L. Finck Laboratories and by Mr. Lander (Minneapolis) to determine the kind of results obtained from present accredited laboratories before deciding on making final tests at two, three or four laboratories that, it is hoped, will provide a lower "k" factor for loose-fill than the 0.48 now in the Guide of A.S.H.R.A.E. This work has not been completed; the best results so far have been from Finck.

In the course of this discussion the question arose as to the density range of #2 vermiculite loose-fill insulation available. At the present time A.S.T.M. Specification C516-63T includes a density range of 4 to 8 lbs. per cu. ft. The Committee

felt that 8 lbs. was too high, and unanimously approved a new density range for vermiculite loose-fill insulation of 4 to 5 lbs. per cu. ft. for both #1 and #2 material. It is understood that this range will be employed in making the tests, and that eventually we will have to have the A.S.T.M. specifications, and any other specifications giving the wider range in density, corrected. New conductivity tests on vermiculite masonry fill will be made at independent laboratories by Zonolite Research Laboratory when data is obtained on the kind of results that can be expected from such laboratories in connection with the tests on loose-fill insulation.

(2) Structural Clay Products Institute and National Concrete Masonry Assn.

President Boone reported on the presentation made on vermiculite masonry fill at the S.C.P.I. annual meeting at Hollywood, Fla. on November 17, 1964 by Mr. Barron and himself and on the showing of our film, "It's All in the Wall". Favorable comments were made by S.C.P.I. members and the Structural Clay Products Research Foundation.

Mr. Boone mentioned the good relations existing between Mr. Barron and the S.C.P.I. personnel. He also reported that a group of men representing S.C.P.I. had made a trip to European countries to investigate the use of masonry in which they found masonry cavity walls insulated with waterproofed mineral wool. Information on their findings will be prepared and available later.

It was the opinion of the Committee that the members of the Institute should do more promotional work with regional or district offices of S.C.P.I. and N.C.M.A. It was recalled that the Institute and Zonolite Div. - W. R. Grace & Co. have forwarded to members lists of the personnel and office locations of S.C.P.I. and N.C.M.A. regions and districts. Messrs. Boone and Barron were requested to prepare a letter to send V.I. members indicating the results of the meeting with S.C.P.I. and again suggesting that they work more closely with the representatives of these two organizations.

The Secretary called attention to the fact that N.C.M.A.'s Washington office has and are accepting articles from V.I. on jobs employing concrete masonry units and vermiculite masonry fill.

(3) National Electrical Manufacturers' Assn.

The Secretary reported that we had been requested to participate in a program on the use of insulation in electrically heated buildings at the 1966 annual meeting of N.E.M.A., along with representatives of other insulations. Accepting the invitation, we outlined to Dick Smith of N.E.M.A. what we are attempting to do to get information on the cost of heating and/or air-conditioning electrically heated buildings insulated with vermiculite and suggested this as the basis for our discussion. It was his opinion that this is exactly the information their members would find of most interest. Accordingly, whatever information is available on this subject at V.I.'s annual meeting at Point Clear, Ala. in April, 1965, will be used, plus similar data obtained between that time and the 1966 N.E.M.A. meeting. The person to represent our industry was purposely left open so that this could be decided at a later date.

(4) Edison Electric Institute

The Institute was requested to contact E.E.I. further to determine the possibility of having an appropriate individual from our industry discuss vermiculite insulations on one of their annual meeting programs. This will be investigated. It was felt that E.E.I. would be just as interested in the type of information which is being prepared for the V.I. 1965 annual meeting and for N.E.M.A.

(5) Distribution of Institute Masonry Fill Film

The Secretary reviewed the distribution of the Institute's film, "It's All In the Wall", through Sterling Movies U.S.A., Inc. He stated that the distribution during the first four months was less than anticipated, but that Sterling was sending out another mailing announcement as of December 1, 1964, to approximately 13,000 persons, advertising the film and its availability. This mailing is going to the following:

Structural Clay Products Institute
Masonry Guilds
N.E.M.A.
American Public Power Assn.
American Gas Assn.
National Assn. of Home Building
Mason Contractors' Assn. of America
Nat'l. Assn. of Building Owners & Mfrs.
American Motel & Hotel Assn. (master hosts)
National Concrete Masonry Assn.
Masonry Assns.
National Rural Electric Coop. Assn.
Building Contractors
Heavy Contractors
Schools of Architecture
American Institute of Architects
3000 individual architects in Dallas, Milwaukee, New Orleans, Miami, St. Louis, Boston, Atlanta, New York City, Chicago, Detroit, Houston, Washington, San Francisco, Los Angeles.

(6) Vermiculite Masonry Fill - U.S. Air Force

Mr. Barron gave a progress report on the work being done with the Air Force to accept our masonry fill in connection with Air Force construction. He said that with the help of E. R. Kraft of Zenolite Div. - W. R. Grace & Co.'s Washington office, we were able to locate two jobs in the Washington area in which this material was being installed and had a representative of the Air Force inspect them. They wanted to do this before giving final consideration to including masonry fill in their specifications.

(7) Federal Specification for Vermiculite Loose-Fill and Masonry Fill Insulations

Mr. Barron reported that copy for these combined specifications is being prepared, but that the main thing holding up finalizing it are the new conductivity factors which we hope to obtain on vermiculite loose-fill and on vermiculite masonry fill composed of either #3 or #4 material. These values must be included in the final specification.

(8) Fire Test on Concrete Block Wall (Filled with Masonry Fill)

The Committee was informed by Mr. Barron that it was not possible to get an interpolated fire rating for a concrete block wall with masonry fill from either the National Board of Fire Underwriters or Underwriters' Laboratories, Inc. In fact, the latter organization proposed that a fire test be made on a wall composed of concrete block, half of which to be unfilled and the other half to be filled with our material. If such a test is satisfactory, Underwriters' Laboratories indicated they would then be in a position to issue a report indicating the additional fire resistance to be obtained by filling block walls with vermiculite masonry fill.

This matter was discussed, and since masonry fill is involved, it was decided that the matter should be referred to Messrs. Upchurch and Perrine of Zonolite Div. - W. R. Grace & Co. for final decision. Accordingly, this subject was permanently removed from the agenda of the M.D.C.

(9) Use of Masonry Fill in Existing Walls

Mr. Kelley spoke of the development of equipment, mounted on a truck, designed to blow masonry fill into existing walls. He said that this had been tried out and found to be satisfactory in many cases, but not so in others. He further stated that work is being done on the techniques of blowing such material into walls, particularly with coated #4 material. Mr. Kelley indicated that if the proper equipment and blowing technique could be developed, that it was intended to establish applicators for doing this - perhaps contractors now applying mineral wool in this manner.

There was an interest in this application of masonry fill. Mr. Kelley stated that he would like to have it tried out by a number of people within the industry to see whether it works satisfactorily in their areas.

(10) Sound Deadening with Vermiculite

The subject of sound deadening or the reduction of sound transmission through partitions, floors, etc., was discussed. The tests which the Institute made at Geiger and Hame Laboratories on a gypsum wallboard partition and a concrete block wall were reviewed. Mr. Perrine indicated that they had not found a way to present the results of these tests which would be meaningful to the members, since the reduction in sound transmission, particularly on the block wall, was low, according to the standard test procedure.

The initial California contact had with the National Oak Flooring Assn. (Memphis) with respect to the use of vermiculite as a sound-deadener in floor construction was reviewed, and the Committee was informed that that association had not so far replied to correspondence on the subject. The Institute office is following this up.

Mr. Kelley discussed this subject generally. He stated that Zonolite Div. intended to investigate all possible uses for vermiculite in connection with the subject of sound deadening or the reduction of sound transmission.

PLASTER AND FIREPROOFING

Mr. Boone reported that plaster product sales are up over a year ago due, principally, to the increased use of Type MK fireproofing. Other plaster products are down slightly.

Mr. Moran, Market Development Committee representative on the Plaster and Fireproofing Committee, read and reviewed Chairman Dambros' report dated November 20, 1964, which referred to the fire test program conducted during the fiscal year and that the Committee intends to have a meeting the early part of 1965. At that time, Mr. Dambros indicated, the Committee would consider testing different floor systems than those already tested.

(1) Underwriters' Laboratories, Inc.(a) New Thicknesses and Fire Ratings for 3rd Floors and RK Floors

The Secretary discussed the full-scale and small-scale tests that had been made in connection with this subject, and gave the new thicknesses proposed for two and three hour ratings on the floors mentioned, as follows:

3rd BLEND FLOORS (ROBERTSON AND INLAND)2 Hours

7/16" on flat plates
9/16" on sides & top of flutes

3 Hours

11/16" on flat plates
13/16" on sides and top of flutes

ALL-FLAT PLATE FLOORS

7/16"

11/16"

ALL-FLUTED FLOORS

7/8" on bottom
7/8" on sides of flutes
1" across top of flutes

RK FLOORS

7/16" on bottom
7/16" on sides of fluted area
9/16" across top of fluted area

5/8" on bottom
5/8" on sides of fluted area
3/4" across top of fluted area
(see R.4374-15)

- * No rating is included for a two hour all-fluted floor because we don't have either a full-scale or a small-scale test on a 3rd all-fluted floor on which to make a determination. The three hour rating for an all-fluted floor is based on our test R.4374-12 (Design No. 52-3 Hr.) and is at present included in the Design Card mentioned (see Alternate B). This test showed a good factor of safety for 3 hrs. (3:57) so that it was felt to be "OK".

The Secretary said that he believes that this is the first time that U.L., Inc. has attempted to interpolate values in this manner (based on full-scale and small-scale tests) and therefore no publicity can or should be given to the foregoing information until the test report (R.4574-18) has been officially approved by the Fire Council of U.L., Inc. It was his opinion that the report would be ready some time after the middle of January, assuming that it is passed by the Fire Council.

Since a two hour rating for an all-fluted floor is not included, because we don't have either a full-scale or a small-scale test on a 3" all-fluted floor on which U.L., Inc. could make a determination, Mr. Perrine agreed to review the two tests that have been made on 1-1/2" all-fluted floors in which two hour ratings were obtained, to try to determine, if possible, what thickness of fireproofing might be used for a two hour rating with a 3" section. He stated that this might also require, and probably will, some small-scale tests on their furnace located at Travelers Rest when that furnace is available.

(b) Three-Beam Test - Temperature Limitation for Beams

The status of the three-beam test was reviewed. In summary, this test is being held in abeyance until U.L., Inc. makes a decision on whether to establish a temperature limitation for beams. While they have been discussing temperature limitations of 1,200°F average - 1,400°F maximum, U.L., Inc. will probably not decide whether to apply a temperature limitation to beams (and if so, what temperatures) until after the meeting of A.S.T.M. Committee E-5 (Standard Fire Test) to be held in Cleveland early in February.

(2) California Zenolite Co. Fire Test - Ohio State University

Mr. Wendel reported that they had made a three-beam test in the small-scale furnace at Ohio State University with beams protected with 1-1/4", 1-1/2", and 2-1/4" of Type MK fireproofing to determine the length of time required for such beams to reach 1,000°F average - 1,200°F maximum, as required by the cities of San Francisco and Los Angeles. The failure points were reached at 131 minutes, 181 minutes and 288 minutes, respectively.

The tests were run long enough to also determine end-points with temperature limitations of 1,200°F average and 1,400°F maximum for the three fireproofing protection thicknesses mentioned. The end-points in this case were 148 minutes, 236 minutes and 351 minutes, respectively.

Mr. Wendel said that the city of San Francisco had accepted 1-1/2" of Type MK for a three hour beam rating based on this test. They hope to have an approval from the city of Los Angeles shortly.

(3) Two Hour Beam Fire Rating

The Secretary reported that in the series of fire tests which we have made there was no opportunity to test a beam protected with Type MK fireproofing for a two hour rating; since either a four hour or a three hour rating was required. Accordingly, we requested U.L., Inc. to determine whether they could give us an extrapolated rating for two hours on a beam. They have investigated this matter and reported that they are unable to do so.

It was the opinion of the Committee that there is sufficient reason to make a test to obtain such a rating. It was therefore recommended that this opinion be brought to the attention of the Plaster and Fireproofing Committee, and also that they be requested to study the floor construction to be employed to obtain a two hour beam rating, and as much additional needed data as may be obtained in making one full-scale floor test. In doing this, it was also suggested that the companies who have requested a two hour beam rating tell us (a), the size floor beams that have to be protected in their area; (b), the fire-resistance required of floors used in connection with two hour beams (two hours or one hour); and (c), the size and type of steel floors most used (1-1/2", 3", etc.). This information is to be taken into account in arriving at the components of the floor to be tested.

(4) Density of Type MK - U.L., Inc. Design Cards and List

The Secretary referred to conversations and correspondence with U.L., Inc. with respect to this subject. He further stated that U.L., Inc. is now in the process of arriving at the manner in which density will be shown for our material, for other cementitious products and for sprayed-fiber fireproofing. They will have to decide this matter shortly, because the 1965 Cards and List must be sent to the printer around the middle of December. The Secretary indicated that he was keeping in touch with U.L., Inc. and, as matters developed, was checking with the Plaster and Fireproofing Committee to see whether the manner in which densities are listed is satisfactory.

(5) Cooperation with American Iron and Steel Institute - Fire Tests at Ohio State U.

Mr. Barron advised that he assisted in the application of the MK on the 12" beams employed in the test floors being constructed at Ohio State U. About 7/8" of Type MK was applied to each beam for a two hour rating under a beam temperature limitation of 1,200°F average - 1,400°F maximum. According to the schedule, tests are to be made on December 29, January 5 and January 14.

(6) V.I. Publication - "Comparison of Direct-to-Steel Fireproofing for Floor, Beam and Column Ratings"

It was decided that the Institute should revise this publication to bring it up-to-date as soon as possible, but that distribution should be limited to members of V.I. only. In fact, the Market Development Committee requested that there be imprinted on the front page of the publication the words, "For Vermiculite Institute Members Only - Not for Distribution".

(7) V.I. Publication - "Vermiculite Fire-Resistance Ratings"

The Committee decided that this publication should be revised as soon as possible to incorporate the latest fire ratings for our Type MK vermiculite protected constructions, with the understanding that the distribution will be limited to building code officials and fire insurance rating bureaus. Requests for copy of this publication from other sources are to be referred to the member company in which the requests originate, so that they can decide whether to provide copy of the publication to the party making the request.

(NOTE: The action taken by the M.D.C. on the above publications is due to their opinion that our competition is making unfair use of them.)

CONCRETE AND ROOFING

The Chairman requested Mr. Moran to discuss the training program which he has been conducting in Texas for his newest vermiculite concrete roof deck applicators. Mr. Moran explained that these applicators are smaller firms in comparatively small cities, and that he and other members of Texas Vermiculite Co. have been meeting with their applicators to review completely the specifications for various vermiculite concrete roof insulations and roof decks, equipment requirements, application and problems arising in connection with vermiculite concrete application. He advised that he has found this procedure the best way to inform these applicators and, as a result, their vermiculite concrete roof deck business has been stimulated.

(1) Vermiculite Concrete Data Sheets

Mr. Moran commented on Mr. Babb's report to the M.D.C. dated November 27, 1964, with respect to the revision of concrete data sheets. He said that he attended a meeting at Little Rock, Ark. with Mr. Babb and a number of other men to discuss matters with respect to vermiculite concrete, including data sheets, but that to the best of his knowledge the discussion had to do with the data sheets being prepared for Zonolite Div. - W. R. Grace & Co. He was not familiar with revisions to Vermiculite Institute data sheets.

The Secretary stated that this was the first indication he had had that there was any intention to revise the Institute data sheets for distribution at the 1965 annual meeting of V.I. The Secretary also said that, based on the discussions at the last meeting of the Concrete and Roofing Committee, it was his understanding that no effort was to be made to change the Institute data sheets until the A.S.A. Standard for Vermiculite Concrete, which will become the Institute's "long-form" specification, is available. This Standard may or may not be ready by the end of April, 1965.

(2) Vermiculite Mix Design Chart - Slide Rule

The M.D.C. was advised that the Concrete Committee, at their last meeting, had discussed revising the present mix design chart, and decided to put this in the form of a slide rule rather than a chart. Also, the slide rules should be purchased by the Institute and resold to members interested in having such rules for themselves and their applicators. It was recommended that we purchase 2,000 rules at a cost of approximately \$1,500, and resell them as indicated at cost plus 15% for handling, mailing, etc.

After discussion, the Committee agreed with this proposal, and recommended to the Board of Directors that \$1,500 be appropriated by the Board of Directors for this purpose.

(3) V.I. Version - Film on Vermiculite Concrete

The Committee was reminded that they had approved, on June 1-2, 1964, the making of a new film on vermiculite concrete. Since the cost of the film to V.I. was not known at that time, it was decided that this matter should be referred to the Committee later. Mr. Boone stated that the cost to V.I. would be between \$4,000 and \$5,000. The Committee therefore recommended to the Board of Directors that an appropriation for this purpose be made, not to exceed \$5,000.

(4) Approved Vermiculite Roof Deck Applicator Program

Mr. Babb recommended in his letter of November 27, 1964 that the Institute consider changing this V.I. program to coincide with the Zonolite Certification Program. The essential difference is that Zonolite (a) refers to the word, "Certification"; (b) takes samples (cylinders) on each job, which are sent to the Zonolite Research Laboratory for compression strength tests and results are reported to their district office but not necessarily given to the architect or owner of the building involved; and (c) a certificate, signed by Zonolite Div. - W. R. Grace & Co. and their applicator is given to the architect or owner in all cases.

The Institute refers to the program as indicated in the above heading; taking samples of concrete from jobs is not a requirement, and a certificate signed by a member of V.I. and his applicator may or may not be given to an architect or owner, according to the policy of the member company involved.

Mr. Babb's recommendation was discussed in detail, and it was the consensus of opinion of the Committee that no change should be made in the present V.I. program.

(5) V.I. Participation - National Roof Deck Applicators' Meeting

Mr. Babb also recommended to the M.D.C. that V.I. sponsor and pay for the Reception for the above meeting on the evening of February 17, 1965, at New Orleans. The Committee decided that this should not be done.

(6) A.I.A. Manual on Built-Up Roofing Technology

The Secretary referred to correspondence from the American Institute of Architects - specifically, to minutes of a meeting sponsored by this organization and held on August 25, 1964, at A.I.A. headquarters, Washington, D. C. We were not present at that meeting, but representatives from associations and companies representing built-up roofing, roof decks and roof insulation were present. It is our understanding that as a result of the meeting, A.I.A. will attempt to prepare such a manual with the assistance of approximately eighteen associations and companies interested in publication and financing the work required.

While we have not received a direct request from A.I.A. to participate, we understand that this will be forthcoming. It is also our understanding that the cost will be prorated on the basis of eighteen participants at \$2,000 apiece.

After discussion, it was the opinion of the Committee that if it is decided to prepare such a publication, that we should participate and spend not to exceed \$2,000 for this purpose. The Market Development Committee therefore requested that the Board of Directors appropriate this amount of money.

(7) List of 15-Year Old (or Older) Vermiculite Concrete Roof Deck Jobs

The Committee was informed that at the August meeting of the Concrete Committee in Evanston, that data on such jobs received from members was discussed, and that Chairman Babb had decided to review the correspondence and data and decide whether we had sufficient and adequate data to make up a worthwhile list. Because of Mr. Babb's illness since that time, this work has not been completed.

(14) A.S.A. A-122 (Vermiculite Concrete)

Mr. Barron reported that the revised draft of this proposed standard was being prepared and would be sent to all members of Committee A-122 shortly for letter ballot. It is hoped that a favorable vote will be obtained, and that the Standard will be available on or before the time of the Institute's annual meeting in April.



Edward R. Murphy
Executive Secretary

ERM:dc

JAN 30 1969

C.W. Model, Los Angeles

cc: M.P. Bushell, Grant Industries
Los Barron, V.I., Chicago ✓
D. Egan, Cambridge
J. Cambros, L.A.

C25

Walls and Ceilings

January 23, 1969

Dear Buzz:

The February issue of Walls and Ceilings (formerly, Plastering Industries) has an article on page 15 regarding glass fiber reinforcement for plaster and concrete. This might be the answer to a "maiden's prayer" for getting a substitute for asbestos in masonry. Likewise, it didn't appear to be a similar answer to the horsefeather problems.

W.V. Culver

Exhibit 4 1174
Culver 12/12/80
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02332

February 7, 1969

Mr. R. W. Sterrett
Zonolite Div. - W. R. Grace & Co.
62 Whittemore Avenue
Cambridge, Massachusetts 02140

Dear Bob:

We are indebted to Bill Culver's watchful eyes for bringing our attention to an article that appeared in the February issue of WALLS AND CEILINGS (formerly PLASTERING INDUSTRIES). For your convenience, Bob, I have photocopied this article and attached it for your review. It gets into the area of using glass fiber as a reinforcement in plaster and concrete, and Bill suggests the possibility of substituting glass fiber for asbestos in vermiculite Type-MK.

Additionally, Bob, I am wondering if the advent of regulated-set cements would not help in this particular direction. Possibly, regulated-set cement as a binder in some type of vermiculite fireproofing would be better than gypsum. Of course, after you read the article, you will note there can be an alkali reaction between portland cement and glass fibers but the article suggests that appropriate coatings could probably be found for the glass fibers.

With the comments raised in some corners of the country about asbestos, I wonder if this does not have some merit.

This is for your information, Bob.

Sincerely,

Leslie A. Barron
Executive Secretary

LAB:ms

cc: Mr. W.V. Culver
Mr. C.H. Wendel
Mr. D.J. Boone

0000 6

1177

CONFIDENTIAL

CONFIDENTIAL

TO: R. K. Burnham
W. V. Culver
J. H. Greer
L. K. Irvine
R. B. Moran
Brooks Robinson
C. R. Wendell

DATE: March 19, 1970

FROM: T. Egan

SUBJ: Request for Asbestos
Content of Mono-Kote
by S.O.M.

I was informed by Mike Moran that there was a letter from Skidmore, Owings and Merrill, New York, N.Y., requesting information on his cementitious fireproofing as to its asbestos content.

Since this firm has such national prestige, I urge that if you receive this letter of request, please answer honestly and do not be evasive about the asbestos.

The intent of these comments is not to tell you what to say but to provide some guideline, so that everyone replies with basically the same data.

1. The asbestos content in our U.L. formulation is approximately 11% by weight. This can change some due to variance in aggregate weight and tolerances on amounts as outlined in the procedures. A percentage by volume would be very misleading.
2. Please note that being cementitious, this relatively small amount of asbestos is to a great degree locked in by the binder and aggregate. Also, when mixed with water, it is both pumped and sprayed wet which further entraps the asbestos and when dry and set, it remains that way in the cementitious material.

Feel free to call or write me on any matter pertaining to requests for data or comparisons of materials as to asbestos content.


T. Egan

0000 7

TE:cgr

Exhibit 1178
Culver
AM 1 12

103711

ZONOLITE

VERMICULITE-NORTHWEST, INC.

P.O. BOX A
102 C STREET SOUTH W.
AUBURN, WASHINGTON 9

~~A SUBSIDIARY OF W. R. GRACE CO.~~

TO: Mr. J. E. Smith, Jr.
1000 1st Avenue
Seattle, Washington 98101

FROM: Mr. J. E. Smith, Jr.

RE: In receipt of your letter of March 10, 1961, in which you requested information regarding the use of ZONOLITE Vermiculite-Northwest, Inc., in the treatment of water. The following information is being furnished to you for your information:

ZONOLITE Vermiculite-Northwest, Inc., is a synthetic vermiculite which is used in the treatment of water. It is a highly effective adsorbent for a wide variety of organic and inorganic pollutants. It is also used in the treatment of wastewater and in the removal of heavy metals from water.

The use of ZONOLITE Vermiculite-Northwest, Inc., in the treatment of water is a highly effective method of removing pollutants from water. It is a highly effective adsorbent for a wide variety of organic and inorganic pollutants. It is also used in the treatment of wastewater and in the removal of heavy metals from water.

Very truly yours,

W. R. Grace

President, ZONOLITE Vermiculite-Northwest, Inc.

We hope the information given here will be helpful. It is based on our best knowledge, and we believe it to be true and accurate. Please read all statements, recommendations or suggestions here, in conjunction with our conditions of sale which apply to all goods supplied by us. We assume no responsibility for the use of these statements, recommendations or suggestions nor do we intend them as a recommendation for any use which would infringe any patent or copyright.

ZONOLITE

CONSTRUCTION PRODUCTS DIVISION

~~SPACE 14 CO 755 COLORADO BOULEVARD, LOS ANGELES, CALIFORNIA 90021~~

June 19, 1970

TO: R. Sterrett, Cambridge	D. Nigh, Los Angeles
T. Egan, Cambridge	J. Greer, Houston
W. Pickthall, Newark	J. Ottinger, Trenton
B. Culver, Auburn ✓	T. Feit, Cambridge
R. Burnham, Phoenix	B. Chaney, Newark
C. Wendel, Los Angeles	

Subject: Recent developments in Asbestos problems

The last two days Doyle Nigh and I have had interesting, lengthy conversations with the State of California's Division of Industrial Safety and the Department of Public Health. Our conversations were based on following through after a recent directive from the Division of Industrial Safety dated June 8, 1970.

While in our minds the directive very obviously applied to sprayed asbestos, it was in isolated areas used on Mono-Kote operations. The background for the directive everyone is certainly aware of.

The interesting points that came out of our conversations with Mr. Paul Kaplan, Department of Public Health, State of California and Mr. M. Bart, Division of Industrial Safety, State of California, are listed below.

In November of 1968, Mr. Kaplan along with a Mr. Jerry Eisen (Division of Industrial Safety) ran an industrial hygienic study at the Beverly Hills High School where Mono-Kote was being applied. In summary, the test rather conclusively proves that Mono-Kote as it presently exists is well below the recommended guide standards set by the American Conference of Governmental Industrial Hygienists (ACGIH). This is a nationwide group as the name implies located at 1014 Broadway, Cincinnati, Ohio 45202. The State of California happens to follow the standards as I believe most other large municipalities would also follow.

Page 19 of the 1969 Standard indicates a notice of intended change. The most important to us being a change in asbestos particles. For simplicity, I will refer to the allowable limits as threshold limit values with the existing unit of 5 million particles per cubic foot (MPPCF). The proposed change in standard for asbestos will be down to 2 MPPCF.

EXHIBIT 1179
Culver 12/2/88
106681
AMJ

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The test run by Mr. Kaplan and Mr. Eisen independently and simultaneously indicate that Mono-Kote will very probably even meet the more severe new standards.

At the present time the Chief Medical Office of the Health Department is attending a seminar being conducted by Dr. Selikoff. The final status of the new standard will undoubtedly be predicated on the results of this seminar and the observations based on the tests run by Mr. Kaplan and Mr. Eisen.

This letter is intended to keep you abreast of what we feel are important recent developments in this entire picture. This letter should not in any way stop us from continuing with our most pressing immediate problem, namely, the elimination of asbestos from our present product. However, I personally feel until this does occur we can both morally and honestly continue promoting Mono-Kote without fear.

While Doyle and I both consider Mr. Kaplan as knowledgeable a man as we have talked to recently regarding the asbestos hazard, we were both rather amazed that even after running a test on Mono-Kote, Mr. Kaplan honestly did not know the difference between sprayed fiber and cementitious products. Doyle and I learned one thing. Do not assume your building officials knows the difference between products (one wet, one dry). We are making sure everyone in our area really knows the difference.

Specific mention should be given to the excellent job done by Doyle Nigh in establishing the initial contacts with Mr. Kaplan and Mr. Eisen. Without his quiet insistence on seeing these people, we might have overlooked a great deal of what seems to be useful documented information.

Sincerely,


A. W. Dambros

AWD:lp

December 2, 1970

Workmen's Compensation Board
Labor and Industries Building
Salem, Oregon 97310

Attention: A.F. Schoenborn
Chief Industrial Hygienist

Gentlemen:

We appreciate your inquiry regarding the composition of Mono-Kote sprayed fireproofing. Mono-Kote is a cementitious brand of fireproofing which does contain approximately 8% asbestos. I hasten to point out that being mixed in a plaster mix with water and pumped as a slurry, at no time is the asbestos free as occurs with the normal sprayed fibrous kind of fireproofing.

For your information I am enclosing a copy of a test run by the Oregon State Board of Health on the job to which you have reference which gives us an unacceptably good rating in accordance with the accepted threshold limit values.

Very truly yours,

William V. Culver
District Manager

Enclosures

cc: [unclear]

cc: Bob Randall

Exhibit 11-80
Culver AMJ

12/3/80 0000 9

TO: See Distribution List

DATE: June 26, 1969

FROM: T. F. Egan

Gentlemen:

As I noted to some of you recently, I advocate attacking our fiber competition. One of our primary targets, of course, is with the architect. We must eliminate the fiber specification and get them to straight Mono-Kote or at least a cementitious specification. One of the strongest tools is to use the architects own organization as a creditable witness for proper selection of materials, e.g. Construction Specifications Institute (CSI).

I've attached a copy of the CSI document on specifying sprayed fireproofing.

First, you should read and, indeed, study it, because it does a good job of explaining the two basic types of spray. Secondly, since our major concern with fiber is the way they apply the product, I direct you to page G5, under G. Installation Methods, Paragraph G1, last two sentences:

"With fibrous materials, accurate water measurement is highly important. A common way to cheat on the application is to reduce the water flow at the nozzle, thus decreasing density and increasing coverage per pound of fiber."

This should be pointed out strongly to the architect as a warning from his own specification group that it's very likely he will not get what he needs. What he needs is fire protection and that's based on thickness and density, which we give him automatically.

Combine this with bad practice, sloppy work, medical dangers with asbestos, poor quality materials and you have a real program to go after the architect and get him to remove fibers from his specs and to refuse approval of it on the projects.

EXHIBIT # 1181
CULVER 12/2/88
HMS

If we've done our job on the quality of Mono-Kote - then remove the fibers last hope which is price - he get's most jobs based on knowing he can cheat on density and use less than is required according to the tests.

Good hunting.

Sincerely yours,

T. F. Egan

T. F. Egan

TFE:dlc

JUN 30 1960

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 J. S. Titus/Zono-Trenton

THIS COPY FOR:

...
 ...

Exhibit 1182
 Culver ^{mes} 12/2/88

MONOLITE

TO: See Distribution List

DATE: March 13, 1970

FROM: Thomas F. Egan

I was given a jolting reminder recently of a problem that you may have and are not aware of - that is allowing Mono-Kote to be caught in the general category "Spray-on Fireproofing."

One of the largest architectural offices called for support data on Mono-Kote. When I started my presentation by describing that Mono-Kote was cementitious and how it differed from sprayed fiber, they were very relieved. However, had this been explained earlier, as it should have, the architect would have been able to handle his problem easily, saved his time and felt better about our ability to present a product.

In summary, stop assuming that architects know the differences between Mono-Kote and fiber. There is a lot of negative comment about sprayed fiber, and we must be very careful that Mono-Kote is not given a bad label when architects generalize "Sprayed Fireproofing."

Go back to fundamentals and sell the pluses of Mono-Kote. Get your plan for 100% of the fireproofing in your town in high gear today.

Yours truly,

Thomas F. Egan

TFE/jac

ZONOLITE
CONSTRUCTION PRODUCTS DIVISION

TO: See Distribution List

DATE: May 14, 1970

FROM: Thomas F. Egan

Gentlemen:

U. S. Minerals Company has developed a new asbestos-free sprayed fiber "Cafco Type D/CF. The CF stands for "Ceramic Fiber". This does not mean that this product can be sold with UL label service.

Our information, as of this date, is that one test has been passed at UL and was a roof deck assembly similar to our RC-5-1 1/2hr. or RC-10-1hr. It has not been listed by UL, and they do not have equivalency with the new product for their other fire tests.

There have been recent ads in trade journals stating "U.L. Approved", which may be correct in the strictest interpretation, since they ran a fire test.

Be alert and keep selling cementitious Mono-Kote and all its advantages.

Yours truly,



Thomas F. Egan

TFE/jac

P.S. Pretty reliable sources state this new material will demand a 25% price increase and has a higher tested density.

Exhibit 1153
Culver 12/2/84

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RECEIVED
MAY 20 1971

ZONOLITE DIV.
ST. LOUIS, MO. 63103

THIS COPY FOR

ZONOLITE
CONSTRUCTION PRODUCTS DIVISION

67461

TO: See Distribution List
FROM: Thomas F. Egan

DATE: May 20, 1970

NEWS FLASH

Gentlemen:

Cafco Type D C/F has gotten equivalency from U. L., Inc. on most of their floor assemblies, beams and columns. I do not have the specific numbers, but operate under the fact that they have what is necessary.

How this will effect you in the weeks to come, you know best, however, I strongly urge that you start selling strong specs to control in-place density. This new C/F product is tested at 18 P.C.F. and 15 P.C.F. so it is denser.

This is not street knowledge, so please don't you be guilty in spreading it. Let the architect or other find out for himself but stress the fact that with or without asbestos, fibers are a poor application without strict density control by spec or better codes.

Yours truly,



Thomas F. Egan

TFE/jac

Exhibit #1184

Cover 17/2/85 All J

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C7160

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Exhibit #85
Culver 12/12/84



ZONOLITE

CONSTRUCTION PRODUCTS DIVISION

C7405

TO: See Distribution List

DATE: April 17, 1970

FROM: Thomas F. Egan

Gentlemen:

The attached article is very topical to say the least. This is sent to you for two-fold purposes: First of all, it is important that you be alert to the many changes taking place constantly in the field of direct-to-steel fireproofing.

Secondly, since this effects our competitors (sprayed fibers) directly, it is important that you use these facts with architects who have used or are contemplating specifications for sprayed fiber fireproofing. For the present, please sell the inherent advantages of a cementitious product.

This article, having been written by Mr. Rosen, would be an ideal piece to distribute or at least use as a point of reference with all architects and engineering firms.

Keep in touch on particulars.

Yours truly,

Thomas F. Egan

TFE/jac

Attachment

Controlling Construction Pollution

This column concludes that due to its contribution to air pollution, asbestos-sprayed insulation must be eliminated in future construction. Rosen is Chief Specifications Writer of Skidmore, Owings & Merrill, New York.

The hazards of air and water pollution are slowly being recognized as more statistical information on their effect on the human environment is coming to the attention of a concerned citizenry. Since the publication of *Silent Spring*, by Rachel Carson, people have begun to question the dangerous side effects that result from chemical pesticides, automobile fumes, and raw sewage dumped into our streams and rivers. Industrial and human wastes, carelessly or innocently disposed of into the atmosphere or into rivers, have an effect on nature's biological balance that governs the production of oxygen and the growth of marine and animal life. In addition, as architects, we should decry the despoilation of our environment resulting from the accumulation of physical mounds of garbage, junked cars, and industrial waste products.

We should also take a closer look at our construction practices to determine whether we are a party to this pollution as a by-product of our designs, and whether we can reduce or eliminate some of our own contributions to this problem area.

Certainly in demolition of existing structures in urban centers, we should restrict the amount of dust that develops. In some European cities, barriers consisting of plastic envelopes are utilized around demolition sites to confine the dust resulting from these operations. Perhaps our Building Departments and our Air Pollution Control Departments should institute stricter controls over such procedures.

A more striking example of how architects can reduce pollution that actually contributes to fatalities is in the selection of certain sprayed-on fire proofing and insulating products.

In 1900, a London physician, in performing an autopsy upon the

body of an asbestos-textile worker found asbestos particles in the lungs and attributed this death to the worker's occupation. Several isolated instances occurred subsequently where an examination of the lung tissue of deceased asbestos workers indicated the presence of asbestos. In 1924 an English physician, Dr. Cooke, after an extensive autopsy and subsequent search of medical literature, concluded that the death of a patient resulted solely from the inhalation of asbestos fibers and assigned the name asbestosis to this disease.

An investigation of some 363 asbestos-textile workers in Great Britain in 1928 disclosed that 95, or about 25 per cent, showed evidence of asbestosis. As a result, legislation was enacted in Great Britain to require improvements in ventilation and exhaust systems in asbestos-textile plants and periodic examination of workers. Although this improvement in working conditions lengthened the life expectancy of these workers, it was learned in 1935 by Dr. Lynch in this country that asbestos workers were dying of cancer as a result of their association with asbestos. Independent investigators in many parts of the world were likewise coming to the same conclusion based on their studies of the association of workers with asbestos.

Dr. Selikoff, of New York's Mount Sinai Hospital, had an opportunity to examine the records of members of the Asbestos Workers Union. The study covered a total of 1522 insulation workers between 1942 and 1962. It was found that the death rate from cancer among these asbestos workers was about seven times greater than that of the general white male U. S. population. These observations are staggering. In addition, one must conclude that

not only are people who actually work with asbestos exposing themselves to asbestosis and cancer, but also that allied tradesmen in the building construction industry, closely associated with this work, are subjected to this exposure. Steam fitters, electricians, carpenters, acoustical workers, masons, structural steel erectors, and others employed on projects using spray-asbestos insulation in the area of this contamination, and who inhale these asbestos particles, are exposing themselves and are likely candidates for this disease.

Equally disturbing is the fact that asbestos is practically indestructible; while it may disintegrate, it is an everlasting contaminant in the atmosphere. It has been estimated that during its application as fireproofing to structural steel members and metal decks, about 10 per cent overshoots and is projected into the atmosphere. On high-rise structures in urban areas, spray-asbestos fireproofing has been found three and four blocks from the construction site, so that the unsuspecting general public is likewise subjected to this hazard as well as the tradesman directly involved in its application. While this relationship between a casual encounter with asbestos and possible development of disease in the public has not been established, it behooves the architectural profession to consider other materials to perform the work of sprayed-on fireproofing and insulation.

Not only is there a clear and present danger in the initial application of asbestos on the health of the installers, but 30 or 40 years hence, when these buildings are torn down, the demolition operations, if not properly controlled, will add more asbestos fibers to the atmosphere. The time to use substitutes for asbestos sprayed insulation is now.

TO: ~~See Distribution List~~

DATE: June 25, 1970

FROM: T. F. Egan

Gentlemen:

The heat from the asbestos problem is radiating in many directions. One which is becoming widespread is a sudden concern by previously unconcerned building officials over ratings and UL design conformance.

Please be extremely careful on all projects that you secure local building official approval on the use of Mono-Kote for specific projects. We have several situations now where the official has started to question lightweight concrete fill used on designs showing structural sand gravel fill after contractors were finished or over half complete.

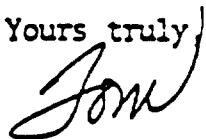
In other words, don't take approvals for granted, get with your building officials and be sure of approvals on designs. Be very careful that your fireproofing applicator has written approval based on submitted UL designs BEFORE he starts.

Many of you do this all the time. However, if you've been working with officials who were lax and "Show me any UL test - okay," get some approval in writing for design submitted on a project. They may suddenly wake up and start demanding all kinds of validation from the contractor.

You should know your own local conditions, but all of you, please don't take anything for granted. Check closely with your contractors that they are not spraying on some verbal order from the general contractor. Worse yet, spraying on your verbal approval.

Be careful and be right.

Yours truly,



Thomas F. Egan

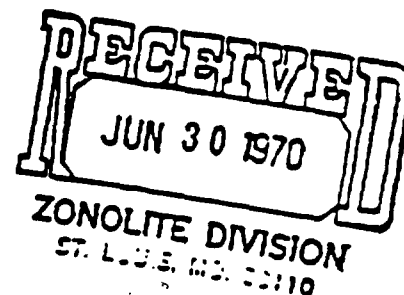
TFE/jac

Exhibit #1186
Colver 12/1/84 AHJ

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B. R. Williams

THIS COPY FOR





TO: Sec Distribution List

DATE: August 20, 1970

FROM: T. F. Egan

SUBJECT: Research and Development
Program for Asbestos
Mono-Note

The attached program prepared by Ralph Bragg is to some extent a report on research efforts outlined from the meeting in Cambridge July 28th and 29th.

It is important to note that this report will be revised regularly as our test program develops and the work will be documented and written in a comprehensive manner.

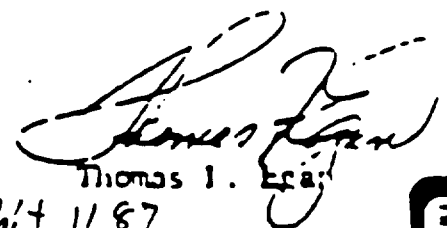
The research work is involved in the most emotional and controversial area of construction pollution. Remember that not only are the methods unproven, but methods or limit values of control have not been established. Therefore, as the data becomes fact we must be able to adjust our research effort.

Recent discussion with Johns-Manville personnel - Dr. Sidney Spiro, Mr. Ed Fenner - confirm my earlier comments that, barring some medical fact to the contrary, the health hazard of asbestos will require the ban on loose asbestos particles to the atmosphere, and probably within one year.

Already we have lost a major project in Philadelphia; and I'm sure it may follow across the country. The asbestos-free product will be in order.

- Knowing this, I again want to emphasize the importance of the development program discussed in our July meeting. Reference to my letter of August 10th - "Fireproofing Products Research". The market belongs to the firm that provides a new "pollution-free" competitive product.

Your attention to this situation, comments and inquiries are of course invited for all others at once on the subject.



Thomas I. Egan

TFL:dlc

Exhibit 1187

Attachments

Col. 12/2/70



VALENTINE, FISHER & TOMLINSON

CONSULTING ENGINEERS

ASBESTOS ABUSE DAMAGE L.L.C.

520 LLOYD BUILDING • MAIN 3-0717
SEATTLE, WASHINGTON 98101

W. M. VALENTINE, M.E.
ARTHUR K. FISHER, M.E.
JEROME D. TOMLINSON, E.E.

March 23, 1971

ASSOCIATES
WAYNE A. HANSEN, M.E.
RONALD S. COLETTI
DOUGLAS W. GABLER
PHILIP A. WOODRUFF
DENNIS W. FINLAYSON
HENRY L. ROYCE, JR.
THOMAS G. JOHNS, M.E.
WILLIAM T. McDONALD
DEAN A. HANNIG

Mr. William V. Culver
District Manager, Zonolite
Zonolite Construction Products Division
W.R. Grace and Company
102 C Street S.W.
Auburn, Washington 98002

Dear Bill:

Re: Asbestos Office Building Ventilation System
Evaluation Report and Testimony as Required

As mentioned during our discussions Monday, the subject report would be best presented to the legislature if sponsored by W.R. Grace and Company. Our cost for preparing the subject report was \$825.00 which includes a very minimal overload rate and laboratory expense. You may use the subject report if you reimburse us our cost of \$825.00.

We prefer to supplement our data with additional data. We are prepared to reduce the cost of the above report by \$325.00 if W.R. Grace will retain Valentine, Fisher & Tomlinson to perform additional evaluations. The additional evaluations will involve sampling for asbestos particles in duct air from two buildings, from sampling ports in the return and supply ducts for asbestos particles for a total of 4 samples. Each sample will include 3 millipore filters for a total of 12 filters. The filters will be analyzed by optical microscope for the presence of asbestos particles down to 0.5 microns in particle size.

The cost for the additional evaluation is estimated to be as follows:

Presurvey (building selection and sampling port locations, etc.) 1 day @ \$15.00/hour	\$120.00
Sampling 3 days and 2 men @ \$10.00/hr.	480.00
Laboratory identification and filter analysis \$20.00/sample x 12 samples	240.00
Report Preparation - 2 days @ \$15.00/hr.	300.00
Report typing, Duplication (5 copies, master available for use) Supplies, Travel, Misc.	205.00
	<u>\$1345.00</u>

Exhibit # 1188
Culver 12/12/88 AMJ

Mr. William V. Culver

-2-

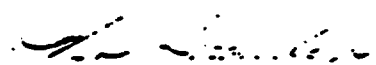
March 23, 1971

Not more than a maximum fee of \$1,300.00 would be charged for the above service.

If you require interpretation and testimony before legislative committees or as required, a fee of \$15.00 per hour plus expenses will adequately cover such services.

Yours truly,

VALENTINE, FISHER & TOMLINSON


Wesley D. Snowden, Manager
Environmental Services

WDS/fb

ZONOLITE
CONSTRUCTION PRODUCTS DIVISION

March 22, 1971

TO: Committee on Business and Professions

REFERENCE: House Bill #927

SUBMITTED BY: Zonolite Division, W. R. Grace and Co.

In review of House Bill #927, Zonolite Division of W. R. Grace Company submits the following recommendations for amendment of the proposed Act:

1. Page 1, Line 6, add to Section 4:

"...which subjects any individual to asbestos fiber counts in excess of the Threshold Limit Value as defined by American Conference of Governmental Industrial Hygienists."

Respectfully submitted,

William V. Culver
District Manager

109298

GRACE

April 1, 1971

Mr. Gene Killion
Seattle Chamber of Commerce
Seattle, Washington

Reference: House Bill 927

Dear Mr. Killion:

While I agree with the intent of the reference bill, I think it is necessary that some yardsticks be applied to the bill which will allow what has been satisfactory installation of material in the past to continue.

To help you understand the situation better, there are two basic kinds of spray fireproofing insulation materials on the market. One is a mineral fiber containing asbestos and a binder which has been forced through an air hose in a dry condition and dampened by a water ring at the nozzle. The results can be that much of the fiber does not stay in place and can drift outside of the building limits. Likewise during service some of the lightly bonded fibers can fall off and become respirable.

It is my belief the intent of the bill was to prevent this kind of thing from happening.

The other kind of fireproofing is generally known as cementitious and is wet mixed in a plaster mixer and pumped through a hose as a wet slurry and a spray pattern is produced by a air jet which creates globules. Any material not hitting the beams falls on the floor as discrete particles with the 10% asbestos firmly bound by the gypsum binder.

Exhibit II 1189
Cover 12/12/88 AMJ

I am attaching reports showing that Mono Kote is below the Threshold Limit Values as defined by the American Conference of Government Industrial Hygienists. Likewise, we have had two occupied buildings tested, which shows that there is no residual sifting of asbestos out of Mono Kote.

We appreciate your committee's endorsement of the amendment to House Bill 927 which I submitted to the Legislature Committee on Business and Professions.

Very truly yours,

William V. Culver
District Manager

Enclosures

Culver ZONOLITE DIVISION

TO *C. E. Hender, J.M.*

DATE May 10, 1971

FROM *W. V. Culver, Auburn* SUBJECT

CC:

I would like to hire Wes Snowden for the up to the maximum he has shown of \$50.00 to represent us. I think he knows our place in the market, and would defend us adequately if a discussion comes up regarding asbestos.

As you are probably aware, Wes was instrumental in having both the Chamber of Commerce and the Mechanical Engineers Association support the amendment on asbestos which I proposed to the State Legislature.

W. V. Culver

W. V. Culver

Attachments

OK
W. V. Culver 5/12/71

EXhibit # ~~490~~ 1190
Culver AMJ
12/2/84

TRACE

109299

07665

RECEIVED

C.H. Wendel, L.A.

December 17, 1971

DEC 20 1971

W. V. Culver, Auburn

CAMBRIDGE

✓ Tom Felt

I had lunch with Dr. Hansen, Chief of the Industrial Hygiene Section, State Department of Labor and Industry, and he is quite in favor of a TLV control for fireproofing as well as other contaminants. He does feel that the TLV of asbestos may be reduced by the ACGIH to one or two fibers greater than 5 microns per cubic centimeter. I think with low air pressures and good housekeeping on the job we might even be able to function with a lower TLV than the current one.

It was Hansen's feeling that rock wool would be treated the same as glass fiber which is considered one of the nuisance dusts which has a TLV of 10 milligrams per cubic meter. It would certainly be helpful if there was some way to determine that rock wool could be considered different than glass and that they have a TLV based on the SIO-2 complex. If that could be done, it would make it more difficult for the sprayed fiber people to compete with MK-IV even. I think Cambridge ought to hire a consultant to see where the current sprayed fiber people stand so far as where their material fits in the scheme of classifications.

Hansen is quite sympathetic to our efforts to prevent wild legislation to get through the legislature, and he has requested our help in the form of testimony should a bill be introduced in the special session of the legislature coming up in January. We probably won't get caught asleep again - I hope.

William V. Culver

EXHIBIT # 1192
CULBERT 443
12/2/86

109295



ZONOLITE

DIVISION W R GRACE & CO

Tom Igan, Cambridge

December 14, 1954

W. V. Culver, Auburn

C.H. Wendel, L.A.

Dear Tom:

Attached is some correspondence between Wes Snowden, the author of the report "Evaluation for Presence of Asbestos Particles in an Office Building Ventilation System" which I sent you on December 11, and the Department of Health, Education and Welfare. The significant part of the correspondence is that NIOSH apparently has a study already underway and perhaps some of your contacts in the East might be able to find out what progress has been made. It would be nice if Mons Rote could get a clean bill of health as compared to Sam, with or without asbestos.

W. V. Culver

Attachments

EXhibit 1191
Culver AMJ.
12/17/54

W. K. Rogers, Regional Manager
Eastern Region

January 4, 1972

William V. Culver, Auburn

C.N. Wendel, Los Angeles

It is difficult to tell from the personnel roster who working for you I should be writing to, so I will send it to you and maybe you can channel it in the right direction.

We have an architect and engineer in Seattle who are commencing schematics on a 20-story hotel for the suburban Detroit area. I don't know specifically what town it is yet.

Since we have laid claim to being fireproofing experts in our area, they have asked for whatever help we can give them with the fireproofing requirements and costs in the Detroit area. If there is more than one code in effect, I will have to try to pin down the town closer for whoever my correspondent will be.

We do make cost estimates for budget purposes on buildings under construction, and I would like some ideas as to the board foot cost of applied Mono Kote on this kind of a building. Is MK III still acceptable in that market, or is it necessary to go to MK IV. We have managed to hang on to MK III and will be writing T.L.V. specifications when the use of asbestos in MK III is questioned.

With some cooperation from my correspondent in that market, maybe I can repay some of the efforts people have made in the past with Yamazaki.

W. V. Culver

WVC:mp

Exhibit # 1193
Culver T.M.J.
12/12/86

000013

097425

ZONOLITE

CONSTRUCTION PRODUCTS DIVISION

4/110
J+W
Please follow
this on this
or return each
file to me. M

1002 G STREET, S.W. AUBURN, WASHINGTON 98002 (206) 852-5725

*I believe that I have discussed
this office with you before.*
M.H.

March 27, 1972

Mr. R. B. Moran, President
Texas Vermiculite Company
P.O. Box 6306
Dallas, Texas 75222

RECEIVED
MAR 29 1972

TEXAS VERMICULITE CO.

Dear Mike:

The Transamerica Investment group in Tulsa, Oklahoma, has been awarded the design and construction of the Washington Trust Building in Spokane. As I understand it Washington Trust will be the major tenant. This job had been through preliminary design in steel with a local architect, engineer and contractor and all of a sudden it was pulled out and given to Transamerica.

We understand the man in charge is Thomas F. Marshall, Kelly/Marshall Associates, Inc., Fourth National Bank Building, Tulsa, 74119. We would certainly appreciate whatever help we can get, particularly to get Mono-Kote as the fireproofing.

I am enclosing a copy of the uniform code research recommendation which gives the thicknesses required for various hourly ratings and which are applicable for the City of Spokane.

The ratings required for this type of building would be for a 3-hour frame and 2-hour floor and roof systems which include the secondary floor and roof beams. Only the columns and beams connecting the columns require three hours.

We are still using MK-3 locally and don't anticipate any problem of maintaining this approval. We would just as soon not have any reference made to MK-4.

We have good applicators serving the Spokane market and if someone was interested in a pre-bid price for a typical floor, we would be happy to get one run out.

We would like to steer away from the unprotected deck assemblies and with lightweight concrete running \$10.00 a yard more in the Spokane market

EXHIBIT #1104
Culver 12/12/88
MHS

GRACE

097402

there is a price advantage to going to a protected deck in lieu of the 3-1/4" of lightweight concrete.

In the unhappy event Transamerica plans to go concrete, I would hope your people would try to get Mono-Kote on the pan joist assembly. We do have something going for us in that Spokane is a Zone II seismic area and I understand their code requires a ductile frame for buildings over 160 feet which is quite rough for concrete. By using our pan joist system the savings of 18 pounds per square foot is quite significant in seismic designing.

I realize this is a whole lot of information but so often I have trouble getting information I thought I would give your salesman something without being asked for it. I think this design is going right ahead and certainly appreciate whatever your people can do for us. I owe you one!

Very truly yours,



William V. Culver
District Manager

cc: C.H. Wendel
Walt Pickthall

George Bryant
Gary Poindexter
Bob Randall

August 21, 1972

W. V. Culver

Memo Note

The attached sounds much easier to live with than indications we have had in the past of what might transpire. As soon as we get more information as to how to help our applicators gain delay, we will pass this on.

William V. Culver

Attachments

WVC:sp

000019

Exhibit # 1195
Culvert
AMJ. 12/12/64 099739

ACTION PRODUCTS DIVISION

The EPA requirements provide for the possibility of obtaining an extension beyond the 90 days after promulgation. Quoting from a recent letter from our legal counsel: "The violation of the Clean Air Act occurs when Mono-Kote is sprayed, not when it is produced. The Enforcement Division would aim at those people who spray your product. Consistent with this, any waiver must be obtained by one who sprays, not by W. R. Grace. This does not preclude W. R. Grace from preparing forms for those who spray Mono-Kote to expedite the procedure and not put a work-load on the customer. 112(c) (B) (ii) provides that 'the Administrator may grant a waiver permitting such a source a period of up to two years after the effective date of a standard to comply with the standard, if he finds that such period is necessary for the installation of controls and that

August 11, 1972

steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.'

"Baum feels that it would be fair and reasonable for one who sprays Mono-Kote to apply and receive an extension. The basis for such a request should be the need for additional time to bring the product into compliance. It would also be useful to indicate that this time is needed to use up most of the existing inventory and to run through existing contracts. I do not advise you to indicate that two years is not enough time in which to comply. In that event no waiver would be granted; consistent with Congressional legislation intent."

I shall continue to keep you updated as additional information becomes available.

Tom

Thomas P. Feit

TPF/jaj

OLITE
ON PRODUCTS DIVISION

AUBURN WASHINGTON 98002

May 24, 1973

Gentlemen:

In accordance with the bulletin dated April 17, 1973, regarding the EPA National Emissions Standards for Hazardous Air Pollutants, all stocks of Mk-3 should be used prior to July 4, 1973.

Please arrange to have any warehouse stocks shipped to one of your customers in time for use of the material prior to the above date. We will be unable to accept any Mk-3 for return or credit.

We appreciate your assistance in this matter, and will be in touch with you in the immediate future regarding substitute material.

Very truly yours,
William V. Culver
District Manager

WVC:mp

Exhibit 1196
Culver f 11/2/84
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