

COPY

IN THE UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
BEAUMONT DIVISION

*
CECIL SCOTT, ET AL *
*
VS. * CIVIL ACTION
* NO. B-84-1103-CA
*
MONSANTO COMPANY *
*

VOLUME III

VIDEO DEPOSITION OF

PAUL G. BENIGNUS

12:48 p.m. to 3:12 p.m.
May 28, 1987
Ramada Airport Inn
St. Louis, Missouri

Reported by:

Linda C. Baker
Texas CSR No. 505/Notary Public
Nell McCallum & Associates
2900 Smith, Suite 104
Houston, Texas 77006
(713) 523-3767

Taxable Cost: \$ _____
Charged to: DAVID M. LACEY, ESQ.
State Bar No:
Attorney for: Plaintiffs

NELL MC CALLUM & ASSOCIATES, INC.

HARTOLDMON0019541

1 APPEARANCES:

2 For the Plaintiffs:

3 DAVID M. LACEY, ESQ.
4 Gilpin, Pohl & Bennett
5 Allied Bank Tower, 23rd Floor
6 1300 Post Oak Boulevard
7 Houston, Texas 77056

8 For the Defendant:

9 WALTER J. CRAWFORD, ESQ.,
10 and
11 CHERYL D. OLESEN, ESQ.
12 Wells, Peyton, Beard, Greenberg, Hunt &
13 Crawford
14 Petroleum Building
15 Beaumont, Texas 77701

16 Videotechnician:

17 James Heironimus
18 Executive Service Groups

19 *****

20 Video Deposition of PAUL G. BENIGNUS, taken
21 on May 28, 1987, at Ramada Airport Inn, St. Louis,
22 Missouri, between the hours of 12:48 p.m. and 3:12 p.m.,
23 before Linda C. Baker, CSR No. 505 and Notary Public in
24 and for the State of Texas, at the instance of the
25 Plaintiff, pursuant to Notice and the Federal Rules of
Civil Procedure.

TABLE OF CONTENTS

WITNESS: PAUL G. BENIGNUS - VOLUME III

	<u>PAGE</u>
APPEARANCES	2
PROCEEDINGS	4
EXAMINATION BY: Mr. Lacey	5
WITNESS SIGNATURE PAGE AND JURAT	135
REPORTER'S CERTIFICATE	136
LAWYER'S NOTES	137

BENIGNUS EXHIBITS MARKED

<u>NO.</u>	<u>PAGE</u>
1 - One-page list of prices of Aroclors 1016, 1221 and 1242, effective 1/1/71 through 3/1/76, with attached separate sheet noted thereon as Exhibit A	100

1 *** VOLUME III ***

2
3
4 PROCEEDINGS

5
6 THE VIDEOTECHNICIAN: Okay. This
7 video deposition is being taken in
8 Cause No. B-84-1103-CA and is filed in the
9 United States District Court for the
10 Eastern District of Texas, Beaumont
11 Division.

12 The style of the case is Cecil Scott
13 versus Monsanto Company.

14 For the record, the video recorder is
15 James Heironimus of the firm Executive
16 Service Groups; and the Certified Court
17 Reporter present today is Linda Baker of
18 the firm Nell McCallum & Associates.

19 We're today to take the oral and
20 video deposition of Paul G. Benignus.
21 We're located at the Ramada Airport Inn in
22 St. Louis, Missouri.

23 Today's date is May 28th, 1987, and
24 the time is approximately 12:48 p.m. It
25 is a continuing deposition.

1 At this time will Counsel now please
2 state their appearances for the record.

3 MR. LACEY: David Lacey, representing
4 the plaintiffs.

5 MR. CRAWFORD: Walter Crawford,
6 representing the defendant.

7 THE VIDEOTECHNICIAN: And would the
8 court reporter please swear in the
9 witness.

10

11

12

13

14

15

PAUL G. BENIGNUS,

16 having been first duly sworn, testified as follows:

17

18

EXAMINATION

19

20 QUESTIONS BY MR. LACEY:

21 Q Mr. Benignus, when we were in my office in
22 Houston, we were taking your deposition. Correct?

23 A Right.

24 Q And we didn't quite get a chance to conclude
25 it. Correct?

1 A Right.

2 Q And we've come back here to complete your
3 deposition. You are the same Mr. Benignus that I was
4 deposing in Houston?

5 A Correct.

6 Q And you understand you are still under oath?

7 A Correct.

8 Q Okay. I think at the point that we stopped
9 your deposition last time, you were starting to talk
10 about the problem of contamination in dielectric fluids,
11 and I wanted to ask you some further questions about
12 that.

13 If I understood your testimony correctly, it
14 was quite important that dielectric fluids not have very
15 much by way of contaminants in them. Is that correct?

16 A That's correct.

17 Q And the reason for that is that if dielectric
18 fluids have contaminants in them, it will have an effect
19 on their electrical properties, which is the point of
20 making them. Correct?

21 A It if it's outside contaminants, yeah, such as
22 moisture.

23 Q Right.

24 Now, with regard to PCB-containing dielectric
25 fluids, of course, there was a problem that existed in

1 the 1960's with regard to the quality of the PCB
2 dielectric fluids made by Monsanto. Isn't that correct?

3 A I never heard of it.

4 Q I see. Let me show you a memorandum dated
5 April 26th, 1967, written by you to Mr. Vince Haupt at
6 Anniston and ask you if you recognize this Document
7 No. 9875-9876 (tendering).

8 Q Yeah, I recognize this without reading it.

9 Q Did you write it?

10 A Sure, I wrote it (tendering).

11 Q One of your concerns here was the problem of
12 being able to control the quality of the PCB products
13 that Monsanto made, and in particular with regard to
14 their ability to meet specifications. Isn't that
15 correct?

16 MR. CRAWFORD: Mr. Benignus, be sure
17 you read the document. Take a close look
18 at it, if you would.

19 BY MR. LACEY:

20 Q (Tendering.)

21 A It says, "Overseas Shipments."

22 Q Uh-huh.

23 A Now, I'll answer your questions down the line.

24 But I know what this is about. I wrote it. It
25 has absolutely nothing to do with the quality of the

1 product. It has to do -- well, you ask the question.

2 Q Well, let -- let me just see if I can
3 understand --

4 A I know what you're reading. That's a -- that's
5 a humorous thing that I wrote there, and I'm sure you're
6 misled by this. I appreciate this.

7 Q This was a joke?

8 A This is a joke.

9 Q I see.

10 A Now, if you want me to explain it, I will. I
11 know how -- I understand your quandary.

12 Q It's just a joke?

13 A It is a joke. It has -- well, if you wish to
14 question about it, I'll answer anything you want to
15 question. It is not a -- it has nothing to do with the
16 quality of the fluid.

17 Q I see.

18 A It has to do with overseas shipments, and I'm
19 addressing that they should look into the kind of drum
20 we're using. I imagine we get into discussing this
21 somewhere. I didn't read it all.

22 Q (Tendering). Well, let me see if I can
23 understand the background for this document.

24 A Fine.

25 Q Monsanto made PCBs in the United States.

1 Correct?

2 A This is correct.

3 Q And within the United States, Monsanto supplied
4 almost all the PCBs that were used in the United States.

5 A This is correct.

6 Q Monsanto also sold part of the PCBs that it
7 made in the United States overseas. Correct?

8 A Correct.

9 Q Within the United States, there was very little
10 competition supplied by foreign manufacturers for --

11 A This is correct.

12 Q -- the PCB products. Correct?

13 A Correct.

14 Q And the reason for that was that the cost of
15 transportation from a manufacturer overseas into the
16 U. S. made it very difficult for overseas manufacturers
17 to compete with Monsanto on price. Correct?

18 A This is correct, yes.

19 Q Now, Monsanto did try to tell its U. S.
20 production in competition with others outside the United
21 States, did it not?

22 A This is correct.

23 Q There were other companies that made PCBs in
24 Japan and in Europe. Correct?

25 A This is correct.

1 Q Within the United States, because there was
2 virtually no competition for Monsanto, as long as the
3 product met the minimum qualifications it would be an
4 acceptable product to the customer. Correct?

5 A It had to meet the specifications, which were
6 standardized worldwide.

7 Q Now, outside the United States, where you were
8 selling in competition with other companies overseas, a
9 customer might decide between buying a Monsanto PCB
10 product and a non-Monsanto PCB product, depending upon
11 which was the better product. Correct?

12 A That's not correct. They were synonymous.
13 They were the same.

14 Q I see.

15 A And you're getting into a comparison of the
16 inherent characteristics and quality of the product.
17 And that is not what this address- -- what this is
18 addressed to.

19 Q I see.

20 A It is -- you're correct. It does deal with
21 shipping product overseas.

22 Now, I'd like to have -- this -- as I told you,
23 this is a -- this doesn't give any of the physical
24 constants or anything else. I know what this is about.
25 I wrote it.

1 Q Well, let's see --

2 A It has to do with the package; the package
3 going overseas. This is the subject matter.

4 Q Well, you --

5 A Now --

6 Q -- you talk about in this memo, do you not,
7 that overseas business is hard to get because other
8 people can buy from your competitors easily
9 (indicating)? Is that correct?

10 A Oh, I would certainly agree with that.

11 Q And you say in particular, "It's not like our
12 domestic affairs, where we don't have to meet
13 competitive quality." Correct?

14 A That's what it says, yes. I told you, in
15 essence, this is a -- a joke here.

16 Q A joke?

17 A Now, if you want to get into the technology of
18 this, this is something quite -- if you wish to discuss
19 that, okay.

20 Q Well, this memo deals with Aroclor electrical
21 quality --

22 A Yes, it does.

23 Q -- of overseas shipments, does it not?

24 A Yes, it does.

25 Q And it was talking about a problem that you

1 really had back in 1967, wasn't it?

2 A No. I don't call this a problem in quality of
3 the -- of the dielectric fluids, no.

4 Q You said --

5 A Let's -- let's face it. The quality of our
6 material, the intrinsic quality of our material, is
7 synonymous with the French, the -- that made in Britain,
8 in Germany, and what have you.

9 Q Why don't you just read for me Points 1 through
10 6 into the record, so we'll have them; what you said.

11 A Well, I told you, this is a joke.

12 Q Well, why don't you read them to me.

13 A Well, all right.

14 "We have high electrical specifications on
15 overseas shipments set -- set arbitrarily, but without
16 assurance they could be met."

17 Q Would you read the next point? I just want you
18 to --

19 A "We have a quality control program, but no
20 control of quality," on the shipments overseas, en
21 route.

22 "We have official electrical test procedures
23 but get all kinds of answers on the same production
24 batch."

25 Q Would you read the other points? There's three

1 more there.

2 A "We know a lot about the idiosyncrasies of the
3 electric characteristics of Aroclor, but we don't know
4 what contaminants in our production and handling
5 environments are the offensive factors."

6 "On occasion we hit the competitive quality
7 specs, but we don't have anything to put our material in
8 capable of holding these values."

9 That is what I'm addressing in this.

10 Q What's the last point?

11 A "We now have considerably more overseas
12 customers than domestic, but it is not easy to brainwash
13 them in Portuguese, Spanish," and so forth, meaning
14 talking to them.

15 Q Now --

16 A I don't know Portuguese and Spanish.

17 Q Now, let me stop.

18 A All right.

19 Q You say Point No. 5, you were -- you were
20 telling the truth? Those were the true facts?

21 A Absolutely.

22 Q Is Point No. 6 true?

23 A I can't speak Portuguese and Spanish. And to
24 converse overseas with people in a foreign language is
25 difficult; it's cumbersome.

1 And we're talking about a will-o'-the-wisp
2 here, a -- an -- almost a myth. Specifically, David,
3 we're talking about volume resistivity and power factor.

4 Q Is Point No. 4 in the memo true?

5 A All right. We don't know what contaminants and
6 handling environments are the offensive factors. David,
7 we're talking -- this is what I was looking for. It
8 gives the subject; here it doesn't give the subject
9 (indicating).

10 Q It does up at the top, doesn't it; "Aroclor --

11 A "Electrical Quality."

12 Q -- Electrical Quality"?

13 A All right. Let's give it a subject. The
14 subject now is going to be the power factor or
15 dissipation factor and the volume resistivity.

16 Now, to begin with, there's no official
17 specification on the power factor, because it is too
18 much a -- almost a myth, these high power factors that
19 we expect the material to have.

20 It's so critical, so sensitive, the very
21 undefinable, minute traces of contaminants, that we
22 can't even manage to have a power-factor specification.
23 David, if we had the product in here and you stuck your
24 finger in it, that would ruin the power factor.

25 Now, here we're talking about shipping

1 overseas. There is -- I wish I had the specification.
2 You will find a volume-resistivity specification. We're
3 talking about a volume resistivity, something on the
4 order of ten to the ninth times power ohm centimeter.
5 Now, that is a tremendous amount of resistivity.

6 Now, what was happening here is that when we --

7 Q Now, I don't want to interrupt you, but we're
8 not going to finish today if you don't answer the
9 question and --

10 A I know you're not, David. Will you accept this
11 as --

12 MR. CRAWFORD: Well;let -- let
13 him -- let him explain it, at least.

14 MR. LACEY: Well, I would like at
15 least to have an answer to the
16 question as to --

17 MR. CRAWFORD: Well --

18 MR. LACEY: -- whether these things
19 are true or not.

20 MR. CRAWFORD: Well, this is what
21 he's trying to tell you.

22 A David --

23 BY MR. LACEY:

24 Q Yeah.

25 A -- this has to do with putting the stuff into a

1 drum of extremely highly refined quality, in a -- a --
2 what did I use? Will-o'-the-wisp thing?

3 We can't even have a power-factor
4 specification. All right. We've refined this
5 exceptionally high quality, as made. The material must
6 respond to this when the user refines it. That's what
7 is important in his plant.

8 Now, what I encountered here, David, is that I
9 suspected the competitors -- particularly the French,
10 and maybe also the German -- that they're overseas.
11 It's a long way from here to Australia. This speaks
12 about Australia.

13 This isn't the first time this subject came up.
14 I spoke to our people about that in the past. I felt
15 that our package for overseas shipment may -- should
16 have been of possibly a better construction. I felt
17 that our package -- maybe it would be the particular
18 seal used on the bone or the liners; that that may be
19 somewhat of a contaminating influence affecting these
20 very, very touchy, critical electrical properties such
21 as, David, when freshly made and refined.

22 If we had it here and you put your finger --
23 I'm not comparing your finger to mine -- if I put my
24 finger in it, it would ruin it, and it would affect this
25 reading.

1 This is a facetious way of getting attention to
2 our plant people that I'm not being as ornery as a
3 junkyard dog, yet I do understand the situation. I'm
4 asking them, "Will you look into our drum for these long
5 over- -- this -- -seas shipments?"

6 I don't speak Portuguese and Spanish, as I said
7 here. It's hard for me to explain this to the people.
8 And I'm having difficulty talking about it right now,
9 David.

10 I'd like to -- I want to answer your questions.
11 It is a facetious way of approaching this subject:
12 "Will you please look into our drum package? I think
13 our drum may not be as good a drum package as the
14 competitors'."

15 And as the result of it, I must have gotten
16 some feedback from a customer if -- I think it mentions
17 Australia; that the material arrived -- this is going
18 back many years.

19 I know it wasn't power factor. Nobody can
20 handle a power-factor specification. We didn't have
21 any. It's so touchy, so critical.

22 But volume resistivity, yes. So let's say the
23 spec on this was -- the specification was 500 times ten
24 to the ninth ohm centimeter. Maybe they read something
25 like 800 or a thousand times. When you put ten times

1 ten to the ninth, you get an awful lot of zeroes out
2 here.

3 All I'm telling you is this is a facetious,
4 humorous way, without acting like a junkyard dog or
5 raising hell with our plant: "Will you please give
6 some -- or at least look at our package to see if that
7 should be looked into." Yeah. Well, every sentence --
8 you can tell that that is a --

9 MR. LACEY: I'm going to --

10 A I'm sorry, but --

11 MR. LACEY: -- object to the
12 responsiveness of the answer.

13 BY MR. LACEY:

14 Q And I'm going to suggest what I'd like to do
15 is, to the extent it's an answer, I'd like to try to
16 ask you some specific questions and --

17 A All right.

18 Q -- and get you to give me the specific answer
19 to that question, so we can try to get this over with.

20 When you said in here, "We have a quality
21 control program, but no control of quality," was that a
22 joke, or is that a real --

23 A That's a --

24 Q -- statement?

25 A -- joke, yes.

1 Q I see.

2 When you said, "We have official electrical --"

3 A We had a very -- before I go farther, we had a
4 very efficient quality control problem.

5 Q When you said, "We have official electrical
6 test procedures, but get all kinds of answers on the
7 same production batch," was that true or was that a
8 joke?

9 A We had very strict specifications. And on
10 something like a power-factor measurement, it is easy to
11 get different answers; and this is why in this very
12 strict specification, as strict as it is, there is no
13 finite limit on power factor.

14 Q Okay. When you said, "We know a lot about the
15 idiosyncrasies of the electrical characteristics of
16 Aroclor, but we don't know what contaminants in our
17 production and handling environments are the
18 offensive -- are the offensive factors," was that true
19 or a joke?

20 A This is also -- it's both ways.

21 Let me tell you this: I don't know what the
22 salts are in your skin, as different from mine, David.
23 I don't. And we're talking about infinitesimal traces
24 of contaminants. It's -- it's a will-o'-the-wisp
25 subject we're dealing with here.

1 Q When you said, "On occasion we hit the
2 competitive quality specs, but we don't have anything to
3 put our material in capable of holding these values," is
4 that true or a joke?

5 A From the standpoint, if you will -- I was not
6 confident that the drum package -- not the quality of
7 the product; the drum package -- that we were doing
8 ourselves justice, from the standpoint I had reason to
9 believe that the competition may have had -- I wasn't
10 sure -- may have had somewhat of a superior container to
11 put it in that would to a greater degree control,
12 handle, maintain this will-o'-the-wisp electrical
13 characteristic that we're talking about, David. It had
14 nothing to do with the intrinsic character of the
15 product.

16 I appreciate your quandary, and I didn't know
17 it was going to be -- come out this way.

18 Q Well, let me show you another document. It's a
19 research and development report from the Anniston plant
20 dated May 5th, 1967, by Mr. G. W. Miller, Document 9839
21 through 9874.

22 In that document, Mr. Miller -- in the summary
23 of the document, he's just got a summary of the document
24 right there that's in two paragraphs. Would you read
25 that, please (tendering)?

1 A "Bayer Chloaphen A-50 is quite superior to
2 Anniston and WGK Aroclor 1254 in electrical properties.
3 This material as received exhibited a resistivity of
4 150,000 times ten to the ninth and thermal chemical
5 chloride stability of .27 parts per million.

6 "Japanese Canochlor 300 is also superior to
7 Anniston WGK Aroclor 1242 even though this material had
8 a 9,600 times ten to the ninth resistivity and a .08
9 parts per million thermal" -- or TC. "It is still
10 considerably better than any routine domestic production
11 in Monsanto operations."

12 Q Now --

13 A This is signed by the -- Miller.

14 Q Who is Mr. Miller?

15 A He's the chief analytical chemist.

16 Q He another joker?

17 A Is he what?

18 Q Is this another big joke about the fact that
19 the Japanese and the German products are better than
20 Monsanto's products?

21 A This is not a joke. But do you understand the
22 difference between 9,600 times ten to the ninth ohm
23 centimeter resistivity versus 150,000 times ten to the
24 ninth ohm centimeter, David?

25 Q My question to you is: Is it true or false

1 that the Japanese and German made PCBs with better
2 electrical properties than Monsanto?

3 MR. CRAWFORD: Mr. Lacey, don't
4 scream at the witness.

5 MR. LACEY: I'm not screaming at the
6 witness.

7 BY MR. LACEY:

8 Q Am I, Mr. Benignus?

9 A We're having fun.

10 Q Okay.

11 A To a mini-mini-mini degree, yes, David. He is
12 pointing out, yes -- it has no practical use,
13 significance, I assure you. And if we want to get into
14 the technology of this, I can.

15 Q Okay. Well, let's --

16 A But he is saying this: He is the chief
17 chemist; and he is saying that he has found, no doubt,
18 by comparative analysis, that here -- it was Germans --
19 150,000 times ten to the ninth ohm centimeter. This is
20 saying that the German quality is very high.

21 Now, I'll make a comparison that is
22 understandable. Our resistivity of 9,600 times ten to
23 the ninth ohm centimeter, David, that would have to be
24 rated -- and this is sensible; I'm trying to be
25 informative -- I would have to rate that A-plus. Okay.

1 Now, on this scale, David, I'd have to say the
2 German stuff is A-plus, and we'll put another plus on
3 there. When we get out to there, it is not of any great
4 consequence.

5 Q The Japanese --

6 A But he is serious here.

7 Q Yeah. The Japanese got an A-plus-plus on
8 theirs, too, didn't they?

9 A The Japanese?

10 Q The second paragraph. He talks about Japanese
11 Canochlor is superior.

12 A Oh. All right. I would rate that -- well,
13 that wasn't as high as the German. Let's put that at
14 A-plus.

15 Q So --

16 A Now, wait a minute. Before we go on with
17 this -- our material often has these same values, David.

18 Q Well, let's get -- let's get down to serious
19 business.

20 A This is very high quality for someone shipping
21 it across the seas to us.

22 Q Let's --

23 A Yes, it is.

24 Q Let's get down to serious business. Mr. Miller
25 was serious in saying that the German PCBs were superior

1 to Monsanto's in electrical properties. Isn't that
2 correct?

3 A In terms of volume resistivity, yes.

4 Q Okay.

5 A That is -- oh, excuse me.

6 Q I -- really, I -- without trying to go into all
7 the technical details, I just want to know whether he is
8 saying that German -- he's serious in saying that the
9 German product was better in its electrical properties
10 than the Monsanto product.

11 A No. This is not correct.

12 Q Not saying that.

13 A He is saying this in terms of ohm centimeters;
14 that he finds this tick superiority, let's call it, in
15 terms of ohm centimeters.

16 Now, that does not encompass the electrical
17 quality, overall electrical quality.

18 Q Well, I guess --

19 A That is merely one feature of it.

20 Q Well --

21 A He is saying that is very good quality. I
22 agree.

23 Q What is he actually says is, "Bayer Chloaphen
24 A-50 is quite superior to Anniston and WKG Aroclor 1254
25 in electrical properties." Those are exact -- his exact

1 words, aren't they?

2 A I agree to this.

3 Q It is true --

4 A He is not an expert in the electrical
5 properties of a capacitor dielectric.

6 Q I see.

7 A Mr. Miller is not.

8 Q I see. He's just an -- a -- a --

9 A He's an analytical chemistry -- analytical
10 chemist. He has run a volume resistivity. He finds
11 that the quality of the Japanese and the German is very
12 fine. I agree with that.

13 Q Not just very fine; superior to Monsanto's.

14 A Well, I won't go with that, no.

15 Q Okay.

16 A I will say that it is good quality material. I
17 must also say Monsanto's is good quality.

18 Q Okay. But as between the two, the German and
19 the Japanese were better quality, weren't they?

20 A No, they were not.

21 Q I see. And isn't it a fact --

22 A They were not.

23 Q Isn't it a fact that it was that difference in
24 quality that prompted the writing of your memo of April
25 26th, 1967, that we've previously looked at, Document

1 9875 and 9876?

2 A All right. Now, we are coming down to this:
3 Here is evidence that the Japanese and the Germans have
4 indeed produced quality similar to ours. They have
5 indeed transported that quality and laid it down in his
6 laboratory at Anniston in a high order of volume
7 resistivity, as he reports there.

8 Now we get down to what I was really driving
9 at, David. Our package -- I am not sure, in terms of
10 this very high volume resistivity -- that's all we're
11 addressing here -- that we were able to put down in
12 Australia this unusually high volume-resistivity
13 reading; not that this has any definite significance or
14 import, as far as using the material is concerned.

15 Q The fact of matter is --

16 A I want our people to see, with this as an
17 example, can they put it into a drum and ship it to
18 Australia and not lose this very high quality that we
19 made when we put it into the drum, but some unknown
20 infinitesimal ionic contaminate, no doubt, caused our
21 volume-resistivity value to drop; not out of
22 specification, because it's still times ten to the ninth
23 ohm centimeters, which is the important thing.

24 I am addressing our package. I'm using this to
25 get the attention of our people; look at our drum and

1 let's see do we need to do anything to improve it.

2 Q Mr. --

3 A That is the story.

4 Q Mr. Miller is not talking about packaging; he's
5 just talking about analytical testing of the product.

6 A He's talking about a package that he received
7 and tested it analytically from Germany, and -- and one
8 from Japan. That's what he's --

9 Q He's --

10 A He received this.

11 Q -- not testing the packaging, though.

12 A All right. No. He is testing --

13 Q He's just testing the product that was in the
14 package.

15 A He is testing the volume resistivity. And I'm
16 impressd with this; not that it has any use,
17 significance, whatsoever. It impresses me with one
18 thing; that the German and the Jap was able to transport
19 over the sea, long trip, put into Miller's hand their
20 product with a very fine volume resistivity reading.

21 Q As a matter of fact, what was really being
22 compared was the quality of the material actually being
23 produced at Anniston by Monsanto before shipment
24 anywhere with the quality material produced by the
25 Japanese and Germans after it had been shipped to

1 Anniston, Alabama. Correct?

2 A I'm not sure of this, no. I'm not sure. This
3 may be true. Now, I'm not sure of this; whether this
4 was it or not.

5 Q Well, you said -- just so I'm clear, you said
6 that what he did was to get the material that was
7 shipped to Anniston by them and compare it with
8 Anniston's production. Correct?

9 A Yes. I think that's what it -- what it does
10 say. It compares Pyroline and Chloaphen with Anniston,
11 with England, with Krummrich, and with the Japanese.
12 Yes, this is what it does.

13 Q And there's nothing about the shipping of the
14 product that's going to make it any better, is there?

15 A No, there isn't.

16 Q So what we know from that, then, is the
17 product, the electrical properties of the Japanese and
18 the German products as it came out of their plant, was
19 superior to the Monsanto products that Mr. Miller
20 tested. Is that correct?

21 MR. CRAWFORD: In those drums.

22 A No. In those terms that he's talking about --
23 and I'm sorry, David; I don't think you have an insight
24 into what the significance of this term is --

25

1 BY MR. LACEY:

2 Q Well, I'm trying to --

3 A -- and this is unfortunate.

4 Q I'm trying to get an insight into the fact that
5 the Japanese and the German were making a better
6 products, and that's what these documents say. And I'm
7 having a hard time --

8 A I appreciate --

9 Q -- with --

10 A -- why you would have a hard time with this
11 thing, and --

12 Q I --

13 A Now, wait a minute; wait a minute.

14 Here -- ours is this (indicating). This is a
15 very high -- this specification is 500. We're way over
16 it.

17 This is over it (indicating). This is way over
18 it (indicating). This is considerably over it
19 (indicating). This is over it (indicating). These are
20 all excellent quality.

21 Now, if we're nitpicking hairs here -- which is
22 a waste of time, but if that's what we're doing -- yes,
23 this is higher than these (indicating). But you
24 don't -- this is at 100 degrees at a -- at a kilocycle.
25 It's ten times to the ninth power, which isn't showing

1 up here.

2 You add these -- ten to the ninth to all of
3 these, and you have very high order. These are all
4 excellent.

5 Q Let me ask a question. You say they're all
6 excellent. Correct?

7 A They're all excellent. Yes, they are.

8 Q And within that degree of excellence, the
9 German product and the Japanese product are somewhat
10 better. Correct?

11 A Within that excellent, on one item, which is
12 this volume resistivity; yes.

13 Q Okay.

14 A That's what the number shows, but it has no
15 significance.

16 Q Okay. Now, in order for those numbers to be
17 excellent, as they are for the Japanese and the Germans,
18 their product has to be excellent, doesn't it.

19 A I certainly say their product is excellent.

20 Q Their product cannot have any substantial
21 degree of contamination in it, can it?

22 A No. Neither does ours.

23 Q And, in fact, in order for them to get these
24 excellent results that are somewhat better than
25 Monsanto's, their product must have slightly less

1 contaminants in it than Monsanto's.

2 MR. CRAWFORD: Well --

3 BY MR. LACEY:

4 Q Isn't that correct?

5 MR. CRAWFORD: -- let's be sure we --
6 we -- you define "contaminants."

7 THE WITNESS: Right.

8 A What kind of -- what are we talking about by
9 way of contaminants?

10 BY MR. LACEY:

11 Q Well, let me hand you a document, 25363, in
12 which David Wood -- do you know Mr. Wood?

13 A Yes. He was at England, yes.

14 Q He writes a letter in October of 1975 to Robert
15 Stenger. Do you know Mr. Stenger with General Electric?

16 A No, I don't.

17 Q I see.

18 A Oh. Sanger is -- wait a minute.

19 Q It -- it's --

20 A Let me see it.

21 Q Certainly. Take a look at the -- at the
22 document.

23 A Stenger.

24 Q Stenger. I couldn't pronounce that.

25 A Stenger.

1 Q And he lists some specific contaminants that
2 have been measured in Monsanto's dielectric fluids. Do
3 you see those there in that first paragraph?

4 A Yes.

5 Q You want to -- is chloro- -- I'm not sure I can
6 read it from here.

7 A Chloronaphthalenes, chloromethylnaphthalenes,
8 chlorinated methylbiphenyl, chlorinated dibenzofuran,
9 and unidentified, 60 parts per -- yes, these are parts
10 per million. I wasn't around -- this didn't come to me.

11 Q I understand. I just -- you asked me about
12 contaminants. Those chemicals that are listed in --

13 A Yeah.

14 Q -- Mr. Wood's letter: Those would be
15 contaminants, would they not?

16 A But they have nothing to do at all, David, with
17 what we have been talking up to --

18 Q Yeah.

19 A These have no bearing on power factor or volume
20 resistivity.

21 Q My --

22 A Now you're in a different area. Can we agree
23 on that?

24 Q Let -- well, let me just ask my question.

25 A Okay.

1 Q Those chemicals that are listed in Mr. Wood's
2 letter, Document 25363, are contaminants in PCB
3 dielectric fluids, are they not?

4 A No. This talks about impurities in biphenyl.

5 Q That wind up in the PCB dielectric fluid.
6 Correct?

7 A Excuse me. I want to read it.

8 (Reviews document.)

9 It says here, "Identifiable materials present
10 in our biphenyl" -- that's biphenyl in England --
11 "contributes to the presence in the polychlorinated
12 biphenyl mixture. The material of primary concern to
13 you are the following."

14 So he's saying the source of these are
15 impurities in the biphenyl, and they are filtering their
16 way down --

17 Q Into the PCB?

18 A -- into the PCB. This is exactly what he's
19 saying.

20 Q Okay. Now -- so my question to you is: The
21 chemicals that are listed in Mr. Wood's letter of
22 October 30, 1975, Document 25363, are chemicals that are
23 contaminants in PCB dielectric fluids. Correct?

24 A Whatever David Wood is talking about here,
25 whatever the -- that PCB fluid is, it -- this is what he

1 says, David.

2 Q Those chemicals would be contaminants.

3 Correct?

4 A Well, this is what he is saying.

5 Q Yes. Well, would you agree that all of those
6 chemicals, if they're in a dielectric fluid, they're not
7 desirable chemicals, but, rather, contaminants?

8 A They are extraneous materials, yes. They are
9 not chlorinated biphenyl.

10 Q And you want -- you are trying to produce pure
11 chlorinated biphenyl for electrical purposes?

12 A This is -- now, wait a minute. You're pulling
13 in electrical. The inference -- again, the inference is
14 that they're -- you're inferring that these are
15 electrical contaminants.

16 Q My -- my question to you is: In producing PCB
17 for dielectric purposes, you want to have PCBs with no
18 contaminants in it. Correct?

19 A Yes. But these materials, David, would have no
20 effect on the electrical characteristics of this
21 material.

22 Q Well, let me ask about that, then. If I had
23 chlorinated dibenzofurans -- that's one of the chemicals
24 he lists. Correct?

25 A Yes.

1 Q If I had chlorinated dibenzofurans in my PCB
2 product I was going to use for electrical purposes --

3 A Yes.

4 Q -- at the rate of 1,000 parts per million --

5 A At a thousand?

6 Q At a thousand parts per million. -- would that
7 affect its electrical properties?

8 A I can't answer that.

9 Q I see.

10 A I do not know, David. If I knew, I'd tell you.

11 Q Well, you -- you said that these don't have any
12 effects on electrical properties, and I was just trying
13 to find out if that's what you mean; that they don't
14 have any effect on electrical properties, or you don't
15 know.

16 A Well, let's put it -- I haven't measured it. I
17 wouldn't expect them to.

18 Q Okay. You would not expect --

19 A I would not expect them to.

20 Q Okay. Fine.

21 A Not on the -- not on what we've been talking
22 about there, the volume resistivity.

23 Q Well, no. I'm --

24 A I'm sincere --

25 Q -- sorry.

1 A -- in what I'm --

2 Q No.

3 A -- telling you, David.

4 Q No. I don't mean --

5 A I'm not fooling around here.

6 Q I don't mean to limit my question about the
7 effect of chlorinated dibenzofurans on electrical
8 properties of PCBs merely to the resistivity. I'm
9 talking about whether or not they are going to cause the
10 electrical properties of PCB dielectric fluids in any
11 respect not to meet specifications. /

12 A I -- not in these amounts. I would not not
13 expect it. Now, I have not investigated and researched
14 this. I would not expect it.

15 Q I see. So the fact that PCBs met electrical
16 specifications at Monsanto would give you no assurance
17 about the quantities of these various chemicals that
18 might be contaminating them. Connect?

19 A You can't measure the quantity of these things
20 by running an electrical -- if that's what your
21 question --

22 Q That is my question.

23 A No. You don't use a power factor or volume
24 resistivity to measure these things you're looking at.

25 Q Okay. Fine.

1 A This is what we're driving at? This is --

2 Q Well, that's my question.

3 A All right. We've answered it.

4 Q Very good.

5 A You use other means. You use direct, very
6 sophisticated analytical tools --

7 Q I see.

8 A -- not the power factor of resistivity.

9 Q So electrical tests of electrical
10 characteristics of PCBs are not a way to measure what
11 contaminants are there or in what quantities. Correct?

12 MR. CRAWFORD: Well --

13 A They are, David, as I've been saying. If we're
14 talking about power factor and we are looking at the
15 contamination that influences the power factor, we are
16 concerned about traces of ionic impurities, David, as
17 would be in your skin --

18 BY MR. LACEY:

19 Q Okay.

20 A -- and in your hand and in my skin --

21 Q Okay.

22 A -- and my hand, or in the environments that we
23 live in. As the prime example would be moisture, H₂O.
24 Okay?

25 Q Are chlorinated dibenzofurans an ionic pur- --

1 impurity?

2 A Not in the terms that I'm thinking of.

3 Q Are chlorinated dibenzodioxins an ionic
4 impurity?

5 A Not in the terms that water is an ionic
6 impurity, of course not.

7 Q Okay.

8 Now, from reviewing the information in
9 Mr. Miller's evaluation of Monsanto's electrical PCB
10 fluids --

11 A Yes.

12 Q -- with the Japanese and the German products --

13 A Yeah.

14 Q -- are you able to determine whether or not the
15 level of impurities generally in their product is
16 higher, lower, or about the same as Monsanto's?

17 A In terms of what you're talking about here,
18 which you're comparing, which is the resistivity, I'd
19 have to say they're essentially the same. They are all
20 excellent materials, and the degree of contamination
21 from ionic impurities is really neither here nor there.
22 We're talking about infinitesimal, unmeasurable things.

23 Q Let me show you a letter dated February 23rd,
24 1973, written by Mr. Wheeler to a Mr. Wilbur Speitzer,
25 with -- is it Speitzer?

1 A Speicher, I think.

2 Q Speicher. With -- with Westinghouse?

3 A Yes. All right. I know that name.

4 Q -- of which you received a blind copy, Document
5 25134 through 25136 (tendering). Did you receive a copy
6 of that letter, as shown on the enclosure or copy page?

7 A Yeah, it had my name on it. I assume I would
8 have received it.

9 (Reviews document.)

10 Q Let me ask you a couple of questions about the
11 letter, if I might.

12 MR. CRAWFORD: Were you finished
13 reading it?

14 THE WITNESS: Well, no.

15 A I -- I don't know that I need to read it all,
16 do I?

17 BY MR. LACEY:

18 Q I don't know that you do.

19 A Well, ask your question.

20 Q Okay. In this letter, Mr. Wheeler says to
21 Mr. Speicher, "It is no" -- I'm looking at the top of
22 Page 2 -- "It is no secret" -- and I'll try to look here
23 you.

24 A Oh.

25 Q "It -- it is no secret that a number of

1 individuals within these agencies have proposed a
2 complete ban on the use of PCBs, including the use in
3 transformers and capacitors. Continued use of these
4 applications is currently allowed under restrictions
5 based primarily on action by Monsanto to prove that the
6 current quality PCBs manufactured in the United States
7 could be used with appropriate precautions without
8 serious industrial hazards and with complete protection
9 of the environment."

10 Do you agree with Mr. Wheeler's statement?

11 A No.

12 Q What about that statement do you disagree with?

13 A Well, that -- that puts a great deal on
14 Monsanto; and there's a lot of other things, people,
15 organizations, institutions, Government, and everything
16 else, behind this statement.

17 Q I see. So you think Mr. Wheeler is in error on
18 that point.

19 A I don't say that he is in error. I appreciate
20 what he -- he's trying to -- what he's trying to say
21 there.

22 I had nothing to do with this, and --

23 Q Let me direct your attention to the third
24 paragraph on this page, where Mr. Wheeler says, "You are
25 probably aware that the most important data which has

1 led the Government agencies to permit the continued but
2 restricted use of polychlorinated biphenyls or the
3 extensive animal toxicity studies which we have
4 completed in the last two years. These included
5 two-year feeding studies in rats and dogs, a
6 three-generation rat reproduction study, possible
7 effects on poultry relating to egg production,
8 hatchability and egg shell thickness, teratology and
9 mutagenic studies. Along with these feeding studies
10 have been tissue residue analysis and a major effort on
11 developing biodegradation data.

12 "As a matter of interest, the cost of these
13 studies to Monsanto has been something more than a half
14 million dollars."

15 Do you agree with that statement?

16 MR. CRAWFORD: Well --

17 A You're talking about something I don't know
18 about.

19 MR. CRAWFORD: Don't -- well, don't
20 comment about something you don't know
21 anything about.

22 A I can't comment on that.

23 BY MR. LACEY:

24 Q I see.

25 A I really can't, David.

1 Q I see. You don't know anything about any
2 studies undertaken by Monsanto to prove that it was safe
3 to use PCBs?

4 MR. CRAWFORD: At that time.

5 A Not -- no. No.

6 BY MR. LACEY:

7 Q Okay.

8 A I was not involved in that.

9 Q I see. And so you don't know whether
10 Mr. Wheeler is truthful in that or not?

11 A I cannot comment, David.

12 Q Okay.

13 A Ask the people in that area. You're asking the
14 wrong person.

15 Q I see. Okay. Well, I'll try to do that, then.

16 In the case of non-PCB dielectric fluids, is
17 contamination also an important matter?

18 A It's -- it depends on what you're talking
19 about. What contamination are you talking about?
20 What -- let's see. Let me hear your question again?
21 You said, "non-PCB"?

22 Q Yes. You -- you've told me that contaminants
23 in PCB --

24 A Yes.

25 Q -- dielectric fluids can be an important

1 factor, so much so that if I stick my finger in it --

2 A Right. I -- I --

3 Q -- I could adversely affect it.

4 A We got it right, David. Ionic, whether it's
5 your finger or my finger; yes. Moisture -- let's call
6 it H₂O, which is very conductive --

7 Q Now --

8 A -- yes.

9 Q -- is that same type of contamination a problem
10 with mineral oil, for example --

11 A No --

12 Q -- as in dielectric --

13 A -- no, David, not to the extent it is with
14 Askarel, because I think we went through the chemistry
15 on our last thing. We discussed among ourselves that
16 PCBs are indeed relatively polar -- I'm talking about
17 polychlorinated biphenyls -- whereas, a mineral oil,
18 David, is not. It's a strain -- a chain of carbon and
19 hydrogen.

20 Q So --

21 A You're absolutely right.

22 Q So it can be more contaminated and still
23 function effectively?

24 A It can be more contaminated without adverse
25 effect on the power factor and -- and these things,

1 because the PCBs are more influenced by these infinite
2 trace contaminants, by -- we're taking here mineral --
3 this is just an example.

4 Yeah. You're right. The mineral oil, the
5 influence of those contaminants that we're talking about
6 is not nearly as pronounced. This is correct, David.

7 Q We talked about mineral oil being a -- a type
8 of petroleum refined product? Is that --

9 A That's --

10 Q -- correct?

11 A This is what it is.

12 Q Is there any particular chemical composition
13 that goes along with mineral oil? We talked about
14 the -- the type of chemical structure for PCBs when we
15 started your deposition. Is there a chem- -- another
16 particular type of chemical structure that goes along
17 with mineral oil?

18 A Mineral oil is also a complex thing. You're
19 from the oil country. You know what petroleum oil --
20 you know more about this than I do. I couldn't draw you
21 the -- the -- the formula. It consists of carbon and
22 hydrogen compounds. They are nonpolar compounds, in
23 simple terms.

24 Q I went to the store to get some mineral oil,
25 and this is what I found (indicating).

1 A I'll take it home with me.

2 Q Is that mineral oil?

3 A I assume it is.

4 Q It says here --

5 A It's a petroleum product, isn't it?

6 Q It says here on the back -- and I'm going to
7 hand you what's been marked as Plaintiff's Exhibit
8 No. 1 -- "Mineral oil and fragrance." Is -- is that --
9 is that what we're talking about, mineral oil?

10 A Well, I think this comes from -- it's
11 petroleum-derived somewhere from some petroleum;
12 probably from Houston, David.

13 Q I -- I don't know where it's -- where it's
14 packaged.

15 A May I have it --

16 Q No. Actually, I'd prefer --

17 A -- and take it home?

18 Q -- I'd prefer that we keep it.

19 A All right. So you call this mineral oil.

20 Q I mean, they -- that's what you're talking
21 about when you're talking about mineral oil?

22 A Essentially.

23 Q Okay.

24 A But it's a different fraction, I assure you.
25 You're not going to be --

1 Q Is it thicker?

2 A Yes, it's thicker.

3 Q I see.

4 A I think so. Yeah, it's usually thicker, I
5 think.

6 MR. CRAWFORD: That's not what they
7 use in a transformer, is it?

8 THE WITNESS: No, that's not what's
9 used in a transformer.

10 BY MR. LACEY:

11 Q Could I -- could I add this mineral oil that's
12 in Plaintiff's Exhibit No. 1 to top up a transformer and
13 have it function correctly?

14 A I -- I -- I'm not -- I'm not a mineral oil
15 transformer man --

16 Q You don't know?

17 A -- David. I don't want to be talking about
18 something I'm not --

19 Q I see.

20 A -- expert on.

21 Q I see.

22 A You want to make a -- want me to give a rough
23 answer to you?

24 Q Sure, if you can do that.

25 A I don't think it would have any great adverse

1 effect on the mineral oil transformer, and I think
2 that's what you're --

3 Q That's really what I'm trying to find out.

4 A Right.

5 Q And -- and so the -- the fragrances that are
6 added to this mineral oil, this baby oil --

7 A That's for me.

8 Q -- probably would not adversely affect --

9 A That -- that's for me.

10 Q No. This is mine.

11 A That's yours?

12 Q Yeah.

13 But you don't anticipate that the -- that the
14 additional chemicals that would be in baby oils, the
15 fragrance in addition to the mineral oil, would
16 adversely affect an electrical mineral oil transformer
17 if I poured this into it?

18 A Not a big mineral oil power transformer.

19 Let me put it this way: That's not water, is
20 it?

21 Q This --

22 A That's yours. You know what's in there.

23 Q Well, I haven't opened this. It's got one of
24 those seals on it (indicating).

25 A Well, I know, but is it water?

1 Q Doesn't say it's --

2 A It's not water, is it?

3 Q No, it's got mineral oil in it.

4 A It's a hydrocarbon, isn't it?

5 Q That's what it says on it, isn't it?

6 A I didn't read it.

7 Q Well, here. Look on there.

8 A I'll take your -- I'll take your word for it.

9 Q Well, can you read right here (indicating)? It
10 says, "Ingredients."

11 A I'll -- pardon?

12 Q Right in there, it says, "Ingredients: Mineral
13 oil, fragrance" --

14 A "Mineral oil, fragrance."

15 Q That's it.

16 A It doesn't say it's a hydrocarbon, does it?

17 Q No, it just says "Mineral oil." And I guess
18 that's what I'm trying to figure out. Mineral oil, you
19 say, is a hydrocarbon.

20 A I -- that's what I assume it is, yeah. I would
21 assume so.

22 MR. CRAWFORD: Well, do you know
23 whether that could be used in a
24 transformer or not?

25 THE WITNESS: Well, you wouldn't use

1 it in a transformer. He's not asking this
2 question.

3 A Are you?

4 BY MR. LACEY:

5 Q It would be a little bit expensive to -- to
6 fill up my transformer with --

7 A With that fragrance.

8 Q Yeah.

9 A Yeah.

10 Q I wouldn't need that, would I?

11 A You wouldn't need that.

12 Q Okay. All I need is just the regular mineral
13 oil?

14 A That's right.

15 Q Okay.

16 A From Houston.

17 Q Okay.

18 You were responsible for, in a general way,
19 marketing of PCB dielectric fluids for a long period of
20 time, but not actually the salesmen in the field working
21 every day. Correct?

22 A This is correct. I was in that area.

23 Q You were in that area from -- I've forgotten.
24 Was it 1947 or so forward?

25 A No. You're talking about the -- the electrical

1 again, are you? Is this what you're talking --

2 Q Electrical, yeah.

3 A Yeah.

4 No. It's more definitive to say from -- oh, I
5 guess something like 1952 --

6 Q Okay.

7 A -- somewhere like that.

8 Q So 1952 through 197- --

9 A -- -4.

10 Q -- -4.

11 A Yeah.

12 Q During that period of time, did Monsanto have
13 any manuals of any sort that it provided to its salesmen
14 so they would know what to do in the field in answering
15 customers' questions?

16 A Well, we looked at those already, David, every
17 one of them.

18 Q Well, we looked at Technical Bulletins, didn't
19 we?

20 A Yes.

21 Q Now, I'm asking about whether they had anything
22 that was like a salesman's manual.

23 A No.

24 Q Let me show you a document, Document 32424
25 through 32464, entitled "Monsanto Chemical Company

1 Salesmen's Manual, Aroclor" (tendering). Have you seen
2 that document before?

3 A (Reviews document.)

4 Well, this gives information about what the
5 different Aroclors are. That's what this does.

6 I've certainly seen -- I may have written this.

7 Q Well, this -- did you see the date that this
8 was written? It's right there on the front.

9 A 1944.

10 Q Did you write this?

11 A In 1944?

12 MR. CRAWFORD: Mr. Lacey, I thought
13 we asked you during Dr. Kelly's deposition
14 whether this was in existence; and you
15 said you didn't know, and you didn't show
16 it.

17 MR. LACEY: I asked him about manuals
18 after he became the Medical Director, and
19 I've not been able to find a single
20 Salesmen's Manual that came into existence
21 after he became Medical Director.

22 MR. CRAWFORD: So this is not what
23 you're talking about.

24 MS. OLESEN: What is the date on
25 that?

1 MR. LACEY: I'm trying to find --
2 October the 1st, 1944.

3 I think Dr. Kelly squelched these
4 types of documents and the information
5 contained in them, because they were
6 adverse to the sales --

7 MR. CRAWFORD: Well, you --

8 MR. LACEY: -- of PCBs.

9 MR. CRAWFORD: Well, you refused to
10 show that to him, and you had it here all
11 the time when you -- when you were asking
12 him about it.

13 MR. LACEY: He was away at the War
14 during that time.

15 MR. CRAWFORD: Well, you just had it
16 and didn't show it to him. Is that it?

17 MR. LACEY: I sure didn't show it to
18 him.

19 MR. CRAWFORD: Okay.

20 MR. LACEY: I sure didn't show it to
21 him.

22 MS. OLESEN: Even though we requested
23 you to.

24 MR. LACEY: These documents are all
25 available to Monsanto. They are all in

1 your hands. I got them from you.

2 MR. CRAWFORD: Well, you said you
3 weren't aware of one.

4 MR. LACEY: I'm not aware of a single
5 one after this one. They disappeared from
6 Monsanto for some reason --

7 MR. CRAWFORD: Well, you had this
8 one.

9 MR. LACEY: -- Mr. Crawford, and I
10 think we'll let the Jury figure out about
11 why they went away and why this type of
12 information wasn't provided to customers
13 any more after Dr. Kelly became the
14 Medical Director of Monsanto.

15 MR. CRAWFORD: You didn't allow him
16 to look at it when you questioned him
17 about it, did you?

18 MR. LACEY: I sure didn't, because
19 I have some trouble with how truthful
20 Mr. Kelly is.

21 A Are you going to say that about me?

22 BY MR. LACEY:

23 Q No.

24 A Well, I think you better not.

25 Q Okay. The worst -- the worst problem you and I

1 have got is you're long-winded.

2 A I don't think I'm as long-winded as you are,
3 David.

4 Q Well, okay. Well, that makes us even. We're
5 both long-winded, then.

6 A We're both long-winded.

7 Q Now, my question to you about this Salesmen's
8 Manual is: Did you write it?

9 A No. And I'm confused with the date of 1944.

10 Q Well, there's no doubt about the fact that this
11 document was written in 1944. Is there?

12 A Well, that's the date it's got on it. You see
13 it, and I see it.

14 Q I know. So somebody must have sat down and
15 wrote this thing in 1944. Correct?

16 A I have never seen this.

17 Q And you've never seen anything quite like it,
18 have you?

19 A What?

20 Q You've never seen anything quite like it at
21 Monsanto, either, have you?

22 A (Reviews document.)

23 Can I -- can I read this?

24 Q Sure.

25 A I don't want to be here all day.

1 Q Well, I tell you what --

2 A Can I take it home?

3 Q Well, I tell you what: I bet if you'll ask
4 Mr. Beistline, he can get you a copy of this document
5 in no time at all; or Mr. Crawford can probably ask
6 Mr. Beistline for it. He should have one there in his
7 office.

8 MS. OLESEN: This one?

9 MR. LACEY: Uh-huh.

10 A (Reviews document.)

11 BY MR. LACEY:

12 Q Have you had a chance to generally look over
13 the document?

14 A Yeah.

15 Q Let me ask you to take a look, if you could, at
16 the page that's numbered down at the bottom 32428.

17 A 428?

18 Q Yes, 428.

19 A 428. Uh-huh.

20 Now, what do you want to know?

21 Q Now, that's where this section discussing
22 toxicity of these compounds starts, is it not?

23 A Yeah (reviews document.)

24 Q And it's talking specifically about the
25 toxicity of Aroclors. Correct?

1 A I read it; right.

2 Q In addition to talking about the toxicity of
3 Aroclors, there's also a discussion -- this continues
4 for several pages, doesn't it, the discussion of
5 toxicity?

6 A Well, I haven't gotten that far.

7 Q Oh, you haven't?

8 A I'm on No. 2.

9 Q Well, there's a lot -- well, there's several --
10 there's several pages of this discussion of toxicity and
11 safe handling, are there not?

12 A Well, I'm -- I'm -- I'm --

13 Q Feel free to look at it. Take your time.

14 A (Reviews document.)

15 See, this was before my time.

16 Q I understand. You've not seen anything like
17 that for salesmen, have you?

18 A For salesmen?

19 Q Yes, to -- to -- or a manual for salesmen to
20 use in talking to their customers. You've not seen any
21 document like this from Monsanto before, have you?

22 A I haven't seen it, period.

23 Q Yeah; or anything like it?

24 A I don't know what you're talking about, for --
25 for salesmen or for anybody else. I don't understand.

1 I -- I wasn't connected with it.

2 Q Well, I understand. It -- it's very clear this
3 document was a document written for salesmen to use as a
4 reference --

5 A Who's saying this?

6 Q -- in talking to customers, isn't it?

7 A Who said this?

8 Q Well, let's stop and look. What is this? It
9 says right up at the top, doesn't it, "Salesmen's
10 Manual"?

11 A Yeah.

12 Q And it's very clear, if you look on the first
13 page there, in terms of what is provided to -- if you'll
14 let -- Mr. Crawford will let you have that back, right
15 down there after the listing of chemicals, that next
16 paragraph says, "Reference should be made to Technical
17 Bulletin P-115 for tables and graphs of physical
18 properties."

19 Do you remember that P-115?

20 A Yes.

21 Q That's the bulletin we looked at and tried hard
22 to figure out when it was around?

23 A Yeah. All right.

24 Q And we know it was around at least as early as
25 October of 1944 now, don't we?

1 A Yes, it was.

2 Q Because it's referred to right here.

3 A Right.

4 Q And he goes on to say, "This --

5 A Yeah, here it is.

6 Q -- "This manual" -- talking about this

7 Salesmen's Manual -- "contains only that information
8 which is not designed for general public distribution or
9 has been made more recently available than permitted
10 incorporation into the printed bulletin."

11 You see that information?

12 A Well, I read this sentence, yeah.

13 Q It's --

14 A "This manual contains" -- what are they talking
15 about? This or the P-115?

16 Q I think it's -- "this manual" is talking about
17 this one right here, isn't it?

18 A This one right here?

19 Q Yeah. Isn't that what it's talking about?

20 MS. OLESEN: If you're confused and
21 you can't tell him --

22 A Well, how can this -- look. I -- I am not
23 qualified to discuss this. I'm not familiar with it.

24 BY MR. LACEY:

25 Q That's fine. Okay. Well, that's fine.

1 Let me ask you to look at one thing in here.

2 Look at Page --

3 A Excuse me just a minute. Let me --

4 Q Well, sure.

5 A (Reviews document.)

6 Yeah. Okay.

7 Q Okay. Now, would you look at Page 32430?

8 A 430. Okay.

9 Q See about the middle of page where it starts a
10 section called "Recommendations for Industrial
11 Practice"?

12 A Right.

13 Q Here it lays out for the salesman in this
14 Salesmen's Manual what would be considered good practice
15 where Aroclors are being handled, doesn't it?

16 A Let me read it.

17 Q Surely.

18 A Where it says, "Unless there is a very good
19 reason for using the hot method"?

20 Q Yeah, and continuing right on all the way over
21 through the middle of the next page.

22 A (Reviews document.)

23 "The cold or solvent method of impregnation
24 with chlorinated naphthalenes" -- well, we -- we didn't
25 make chlorinated naphthalenes. Monsanto didn't have

1 chlorinated naphthalenes.

2 Q That's not -- what's --

3 A Why is it saying this?

4 Q What are the three words on top of that very --
5 the very top of that page?

6 A Up here (indicating)?

7 Q Yeah.

8 A It says, "Monsanto Chemical Company."

9 Q That's a Monsanto document, isn't it?

10 A Well, I'm telling you Monsanto didn't have
11 chlorinated naphthalenes.

12 Q Well, maybe they did back in 1944.

13 A No, they didn't, David.

14 Q I see. You know that.

15 A I -- I can guarantee it.

16 Q I see. Okay.

17 Well, why don't you go ahead and review that
18 entire section that talks about Recommendations for
19 Industrial Practice?

20 A Who wrote this?

21 Q Well, Mr. Benignus, I'd hoped that you could
22 tell me that. Somebody at Monsanto did, didn't they?

23 A I don't know.

24 (Reviews document.)

25 Yeah, I've read this page.

1 Q Go ahead and keep on reading it. It goes on
2 over into the next page, doesn't it?

3 A (Reviews document.)

4 See, here's something that bothers me: "All
5 departments handling chlorinated synthetic waxes."

6 Q Uh-huh. Uh-huh.

7 A Would you -- would you interpret that to be
8 chlorinated naphthalenes?

9 Q Mr. Benignus, what I see in this document is it
10 talks about how to safely handle PCB products. And I
11 see here a listing of things that the salesmen were
12 supposed to recommend to the customers. That's what I
13 see. Isn't that what you see?

14 A Well, why -- no. I do and I don't.

15 Q I see.

16 A Now, I'm supposed to answer your questions,
17 and -- and we're getting into a discussion among
18 ourselves here now.

19 Q Well, is there -- let me ask you this: You
20 were -- you were over the sales area and the
21 communication-of-information area for a substantial
22 number of years at Monsanto.

23 A Not at this period of time.

24 Q No; I understand. But for a substantial number
25 of years, you were over an area where you could supply

1 information to customers about PCBs.

2 A I was associated with this, yeah.

3 Q Yes. Now, here in this Salesmen's Manual that
4 Monsanto put out in 1944, they've got a section on
5 Recommendations for Industrial Practice. Correct?

6 A Yeah. I just read it.

7 Q Yeah.

8 A About in -- in -- talking about each fellow
9 should have two lockers, or something like this.

10 Q Yeah, and -- and let's just go over that.

11 What do they recommend? Two lockers for each
12 worker exposed to chlorinated waxes, one for working and
13 one for street clothes. Correct?

14 A Uh-huh.

15 Q "All work clothes above the underwear should be
16 provided and laundered at least twice a week by the
17 management." Correct?

18 A (Witness nods head up and down.)

19 Q You need to answer out loud.

20 A Yes. Yes, I see it.

21 Q "The workers should change to clean underwear
22 at the end of each shift before getting into street
23 clothes." Correct?

24 A Yes. It's in there.

25 Q "Supervised cleaning: At noon the workers

1 should remove outer cleaning and scrub hands and face
2 under supervision.

3 "At the end of the shift they should be
4 required to take a supervised shower before entering" --
5 "before changing back into street clothes." Correct?

6 A That's what it says. You're reading it.

7 Q Next number: "Protective skin creams or
8 protective clothing should be provided by the management
9 at the discretion of the foreman, nurse, medical or
10 plant superintendent." Correct?

11 A Well, I read it. I wouldn't -- I wouldn't
12 agree with some of that.

13 Q I see.

14 A I agree that --

15 Q You don't agree these steps are necessary as
16 precautions?

17 A No, I'm not saying that.

18 Q I see.

19 A I -- I don't like personally the -- the --
20 using skin cream.

21 Q I see. Okay. But that's not the --

22 A I -- I'm not trying to be confusing here.

23 Q Yeah.

24 A I read it with you, what it says.

25 Q "All departments handling chlorinated synthetic

1 waxes should be thoroughly cleaned according to a
2 prearranged schedule. This should include the removal
3 of all deposits, wax and carry-off from machines, floors
4 and surrounding objects. Workers doing the cleaning
5 should be provided with protective clothing and supplied
6 air or organic vapor masks where exhaust ventilation is
7 inadequate or impossible." Correct?

8 A That's what it says.

9 Q It goes on to say the the foreman of all
10 departments where this material is handled should be
11 apprised of the toxic nature of the material and
12 instructed in safe-handling procedures. Correct?

13 A That's what it says.

14 Q And it says these foremen should make it their
15 duty to check up on workers in their department and
16 instruct them in safe practice. Is that what it says?

17 A David, yeah, I've read it. I -- I can't change
18 what it --

19 MR. CRAWFORD: Well, is this for
20 handling waxes, or what? What are -- what
21 are we talking about?

22 MS. OLESEN: You keep mentioning
23 waxes.

24 BY MR. LACEY:

25 Q Well, the document is a Monsanto document. And

1 go back to the front of the document. What does it talk
2 about?

3 A David, I know --

4 Q Aroclor, doesn't it?

5 A Yes. I read this. And -- and it does say
6 "Salesmen's Manual." But --

7 Q And --

8 A -- this is -- I wasn't there at this time.
9 Now, I read things here, David --

10 Q I see.

11 A -- that tells me things.

12 Q Well, let's go -- let's just talk about what
13 the book goes through.

14 The first thing we have is general --

15 A Oh, I'm not arguing one bit in what the book
16 goes through.

17 Q I see.

18 A I read it with you, David.

19 Q Yeah.

20 A I'm not arguing with what you're saying.

21 Q It talks about -- after the introductory first
22 page on description and properties, the next thing that
23 it talks about are the electrical properties of PCB
24 materials, aren't they? If you go to the second page,
25 that's the next --

1 A Well --

2 Q -- big heading, "Electrical Properties."

3 Correct?

4 A Well, here it says, "Electrical Properties,"
5 yes.

6 Q And that discussion -- it has a -- a listing of
7 information about electrical properties, a listing of
8 information about solubility?

9 A Oh, yeah.

10 Q Information about stability?

11 A I know. I've read it. I've --

12 Q Corrosion?

13 A -- seen it, and I'm with you. I've seen all
14 this.

15 Q Toxicity? It just -- it has -- it has all
16 sorts of information about Monsanto's PCB products,
17 doesn't it?

18 A Yes, it does.

19 Q And what we've been looking at about how it
20 should be handled is in -- is in the section discussing
21 toxicity, isn't it?

22 A Yes.

23 Q Okay. And that's -- and it goes on to talk
24 about the use of Ac- -- Aroclors in adhesive? That's
25 what comes next after the Toxicity section, Page 32431.

1 Correct?

2 A 4- --

3 Q 431?

4 A 431? Well, I'm sure it is if you're saying so.
5 I'm not on that page.

6 Q Why don't you take look at it?

7 A 4- -- no, that's 432.

8 Q After toxicity, it talks about applications of
9 Aroclors, doesn't it? Is that correct?

10 A Application of Aroclors, yes; adhesives.

11 Q It talks about how it can be used in adhesives
12 purposes?

13 A Yes.

14 Q How it can be used in electrical purposes as
15 dielectrics? Do you see that?

16 A Yeah. Here -- yeah.

17 Q It discusses Aroclors used as saturants?

18 A Yes.

19 Q Discusses different flameproofers and emulsion
20 formulas? Going over to Page 436, 32436, it talks about
21 emulsion formula, flameproofers? Correct?

22 A Right.

23 Q This -- this has a -- this has just a complete
24 discussion.

25 If you go on over to Page 32442 --

1 A 42? Okay.

2 Q -- it talks about use as a heat transfer
3 medium? Correct?

4 A Let me look at this.

5 Q Surely.

6 A (Reviews document.)

7 Its use at Anniston.

8 Q As a heat transfer medium. Correct?

9 A Yeah.

10 Q It talks about its use as a hydraulic fluid?
11 Correct?

12 A Wait a minute. I'm not that far. I finds this
13 interesting.

14 (Reviews document.)

15 Q Does it talk about its use as a hydraulic
16 fluid?

17 A Yeah.

18 Q It talks about its use on the next page in --
19 in enamels and lacquers?

20 A Wait a minute. Yeah.

21 Q You get over to Page 32450. It talks about
22 some specific specifications for certain Army products?
23 Correct?

24 A (Reviews document.)

25 Yeah. See, this '44 would have been during the

1 War.

2 Q Right. Right.

3 A Yeah.

4 Q And you get over to Page 32454. It talks about
5 its use in lubricants?

6 A (Reviews document.)

7 Uh-huh.

8 Q Get over to Page 32456. It talks about its use
9 in plastics?

10 A (Reviews document.)

11 Q Correct?

12 A Yes. Yes.

13 Q Get over to 32459. It talks about its use in
14 rubber?

15 A (Reviews document.)

16 Q Correct?

17 A All of these are correct.

18 Q Yeah. I mean, it -- this --

19 A I can't say it's not correct. We're reading
20 them.

21 Q This -- this Salesmen's Manual covers just
22 about everything you can ever think of about PCBs,
23 doesn't it?

24 A I think the title of that thing is a bit out of
25 gear --

1 Q I see.

2 A -- Salesmen's Manual.

3 Q I see. Well, it's just --

4 A This tells --

5 Q -- a good reference book.

6 A It -- it is. This -- this tells me some things
7 that I can put into order here going through -- I've
8 never seen this.

9 Q Yeah. But it -- it's --

10 A It's not a book for the salesman.

11 Q It's not for the salesman?

12 A It says that, but --

13 Q Somebody made a mistake?

14 MR. CRAWFORD: Well, don't speculate.

15 If you know --

16 A Yeah. I don't want to -- I -- I didn't prepare
17 this. This is the first time I've seen it, David.

18 BY MR. LACEY:

19 Q Fine. Well, we know it --

20 A I can see this. This is a very good,
21 comprehensive treatise of -- of the subject matter, as
22 you -- this is what you are saying.

23 Q And that -- yeah, that really is my question.
24 This is a very good, comprehensive treatise on the
25 subject matter of PCBs, isn't it?

1 A Yes.

2 Q The treatment here is considerably more
3 thorough than the treatment you find in those
4 application bulletins like P-115, isn't it?

5 A In -- in -- in many respects, it is, yes.

6 Q Including the respects about toxicity and safe
7 handling. Isn't that true?

8 A On that also, yes.

9 Q And you don't ever recall, from the time that
10 you were involved with sales matters on PCBs, seeing a
11 document like this that Monsanto put out any time after
12 1944, do you?

13 A I never saw this.

14 Is there a Coke around, or something to drink?

15 Q We can arrange for that.

16 MR. CRAWFORD: Do you want to take a
17 short break?

18 MR. LACEY: Yeah, we'll take a --

19 THE WITNESS: Did I interrupt the --

20 MR. LACEY: We'll take a real short
21 break, yeah.

22

23 (Recess)

24

25 THE VIDEOTECHNICIAN: Okay. We've

1 been off the record for a short break.

2 We're now back on the record. The time is
3 2:05 p.m.

4 BY MR. LACEY:

5 Q Mr. Benignus, was the program for getting
6 information to customers on PCB products such that you
7 would anticipate that the salesmen who actually worked
8 in the field would get into every customer's hands the
9 documents that would give them information on what PCBs
10 were and how to handle them safely?

11 A Well, I can't say into every customer's hands,
12 no.

13 Q Well, would you expect that by 1972 people who
14 were managing the Industrial Hygiene and Toxicology
15 Departments for major companies would know what Aroclors
16 or PCBs were?

17 A By 1972?

18 Q Certainly.

19 A Oh, I'd have to say yes. The sales- -- would
20 the salesmen know?

21 Q No. I mean, would customers, people who were
22 in industrial hygiene and toxicology for customers of
23 Monsanto, know what Aroclors and PCBs were?

24 A Is your question, would people in industrial
25 hygiene at Monsanto?

1 Q No.

2 A No? Would people in industrial hygiene and
3 toxicology at Monsanto's PCB customers --

4 A Oh; oh.

5 Q -- know?

6 A I would think -- in 1972, I would think they --
7 they would tend to -- in industrial hygiene, definitely.
8 I would have to say I would think that they would by
9 then --

10 Q And --

11 A -- because you're -- yeah.

12 Q The source of the -- one source of the
13 information they should have available to them would be
14 the Technical Bulletins that Monsanto put out. Correct?

15 A You're talking about 1972?

16 Q In 1972.

17 A Yes, plus a lot of other information by 1972;
18 yes. You're talking about industrial hygiene people?

19 Q Yes.

20 A Oh, of course. Yes.

21 Q And if they didn't have the information in
22 their hands by 1972 to know that Aroclors contained
23 PCBs, somehow something had gone wrong with the system
24 of getting the information out. Wouldn't you agree?

25 A I don't know how to answer that question.

1 Q Well --

2 A Specifically, what -- what --

3 Q Well, let me be very specific.

4 It was the job of Monsanto salesmen to get to
5 customers the Technical Bulletins about Monsanto's
6 Aroclor products, was it not?

7 A That was -- yes, that was part of their
8 function.

9 Q And, certainly, those were supposed to be --

10 A But wait a minute. They also -- this
11 literature was available through the mails and so forth.

12 Q Okay. So it could get there on a mailing list,
13 as well as --

14 A Yes.

15 Q -- directly by salesmen?

16 A Yes. It could -- sure.

17 Q And in either event, the literature, if it got
18 there, should be such that a person who got it would be
19 able to figure out that the word "Aroclor" means PCB,
20 shouldn't he?

21 A By 1972, yes.

22 Q Okay.

23 A This was a new-coined word, "PCB," and that was
24 in vogue because of the environmental thing. People
25 didn't call it "Aroclor"; they called it "PCB."

1 I believe that's your question, really, isn't
2 it?

3 Q Well, no. I -- my question is --

4 A No?

5 Q -- whether from Monsanto's literature one
6 should be able to ascertain that Aroclor was the name
7 for polychlorinated biphenyl, or PCB.

8 A Well, I'm sure the literature no doubt did say
9 that Aroclor is polychlorinated biphenyl.

10 Q Okay.

11 A But I don't know that the word "PCB" was in --
12 in vogue. That -- that's -- was something that was
13 coined.

14 Q Let me show you a -- an exhibit, a three-page
15 exhibit that was marked as Deposition Exhibit No. 6 in
16 Mr. Papageorge's deposition. I want to direct your
17 attention to the third page of that, which was marked as
18 Exhibit 6-A in his deposition, which is a letter dated
19 February 2nd, 1972, from a Mr. R. T. Richards.

20 A Yeah.

21 Q The man- -- do you know Mr. Richards?

22 A Dr. Richards. Isn't that Dr. Richards in
23 Research?

24 Q No. This is --

25 A Oh.

1 Q No. This is a different Mr. Richards --

2 A Oh. I don't know him.

3 Q -- R. T. Richards, the Manager of Industrial
4 Hygiene and Toxicology for Texaco --

5 A Oh, yeah.

6 Q -- to Mr. Papageorge.

7 A Okay.

8 Q And in this letter he indicates that they're
9 looking into -- Texaco is looking into their practice
10 with regard to chemicals they buy and whether they may
11 contain polychlorinated biphenyls. And he says in
12 parentheses there "(PCB)," so that he knew that
13 polychlorinated biphenyls were PCBs.

14 A Yes. Whoever wrote this would.

15 Q And that's Mr. Richards.

16 A Yes.

17 Q Now --

18 A In 1972, I would think he might have known
19 that; yes.

20 Q Now, look at this last sentence in this
21 paragraph.

22 A This one (indicating)?

23 Q Yes.

24 A All right. "Texaco has used Monsanto for some
25 time, and your confirmation that no PCBs are present in

1 this series is specifically requested."

2 Q That doesn't make much sense, does it?

3 A No. The man Richards doesn't understand it,
4 does he?

5 Q No. He did not realize when he wrote that
6 letter in 1972 that Aroclors contained PCBs.

7 A Well --

8 MR. CRAWFORD: Now, don't speculate
9 about something that you don't know
10 anything about.

11 BY MR. LACEY:

12 Q Well, it's obvious, isn't it, from the letter?

13 A It's obvious.

14 Q Okay.

15 A There's no speculation. David, this -- at that
16 point in time, "PCB," as you know, was a newly-coined
17 word.

18 Q I see.

19 A Well --

20 Q He should certainly have known that Aroclors
21 contained polychlorinated byphenyls, shouldn't he?
22 That's not --

23 A Depending on what he did. Maybe he was the
24 accountant or something. I don't know, David.

25 Q Why don't you look over -- right over there

1 it's got his title up there. What's it say?

2 A "Public Relations and Personnel, Health
3 Division." I would have to --

4 Q Well, what's his specific title? Manager --

5 A Dr. Richard, Manager, Industrial Hygiene and
6 Toxicity.

7 MR. CRAWFORD: Don't speculate about
8 something somebody else --

9 THE WITNESS: Well, I don't think
10 that's speculation.

11 BY MR. LACEY:

12 Q It's not speculation, is it? It doesn't
13 require --

14 A I'm reading what his title is.

15 Q Yeah. Somewhere, somehow, Monsanto's system to
16 get information out to its customers about Aroclors
17 broke down, didn't it?

18 MR. CRAWFORD: I would object to that
19 question.

20 A No, I wouldn't say that. No, no, David. No,
21 no, I -- I can't accept that.

22 BY MR. LACEY:

23 Q All right.

24 A I -- I'll turn that one around; and I mean it,
25 David. Monsanto did all they could to disseminate

1 information, believe me.

2 Q So it's all just Texaco's fault or
3 Mr. Richards' fault he doesn't know Aroclors are -- are
4 PCBs?

5 A My God, yes, David. You better believe it.

6 Q Okay. No possibility -- no possibility it
7 could be a Monsanto mistake; it must be a Texaco
8 mistake?

9 A No. I'm saying that if I were the industrial
10 hygiene man at Texaco or anywhere else at this point in
11 time in 1972, I should know this much; and you would say
12 you should know this much.

13 Q You would know --

14 A This is --

15 Q You would know --

16 A -- 1972.

17 Q You would know that Aroclor was PCB in 1972?

18 A I would. I did.

19 Q Okay. And -- and Mr. -- and Mr. Richards
20 should have, too.

21 A He did. It says he did.

22 Q I know. But you're saying he should have
23 known?

24 A I would think so.

25 Q Okay. And you don't think the reason he didn't

1 know could possibly be that Monsanto failed to get the
2 appropriate information to him?

3 MR. CRAWFORD: Well, don't speculate.

4 Just --

5 A No, I'm not going to pursue this and -- and --
6 and --

7 BY MR. LACEY:

8 Q I see.

9 A -- comment on this. The literature was full
10 of -- of PCB stuff. We're talking about 1972, David.

11 Q I see. I see.

12 Mr. Benignus, we talked in your deposition
13 earlier about plants that you visited, did we not?

14 A Yeah.

15 Q And what did you tell me about visiting the
16 Westinghouse capacitor plant in Bloomington, Indiana?

17 A I told you I was at that plant when it was
18 newly built. I knew Ralph Marberry, who had designed
19 it; that he had put in a new design, a manifold
20 impregnation versus a batch impregnation that they had
21 used prior.

22 And he invited me to -- it -- it wasn't a
23 formal invitation. It was when I would be in the area,
24 to drop by and see him. He was a friend. I knew Ralph
25 quite well.

1 So I was there, and it wasn't running; but he
2 had built this thing as a manifold-impregnation thing,
3 yeah.

4 Q You told me you had never seen the plant in
5 operation. Correct?

6 A I have never seen that plant in operation.
7 This is correct.

8 Q Now, you learned after the plant went into
9 operation, did you not, that they were handling PCBs in
10 a sloppy fashion, didn't you?

11 A That plant went into operation -- I'm -- Im
12 trying to think when that was. But that was many, many
13 years later.

14 Q What was?

15 A That you're -- that -- that I knew -- I heard
16 what you're talking about, about this sloppy thing.
17 This sloppy thing was at -- well, when was it? I would
18 agree with it or -- yes, I --

19 MR. CRAWFORD: Show him the document.

20 BY MR. LACEY:

21 Q Let me show you -- let me show you a memo you
22 wrote --

23 A Yeah, that's --

24 Q -- September 21st, 1967 --

25 A All right. You got it.

1 MR. CRAWFORD: Look --look at the
2 document.

3 A Agreed.

4 BY MR. LACEY:

5 Q -- Document No. 25281.

6 A I wrote it. Of course, I wrote it.

7 Q Is that a memo you wrote?

8 A Yeah, so we're on the date that I'm looking
9 for, 1967. I had run into this --

10 Q Yeah. Let --

11 A -- in a salesman's report.

12 Q Okay. Let me just stop and ask you
13 questions --

14 A Okay.

15 Q -- so we'll get some clear questions and
16 answers.

17 How did you learn that Westinghouse was not
18 handling PCBs properly?

19 A I learned that by reading a salesman's report.
20 The salesman had called there, and he had spoken to a
21 man at Westinghouse who told him this.

22 Q Now --

23 A And I saw it in that sales report.

24 Q Whose -- whose report was that?

25 A I think it was Randy Graham. It may have been

1 Jim Bryant.

2 Q Was that a written report that you received?

3 A Oh, yes. Yes. So I'm passing along this
4 information.

5 Q Now, in response to the fact that they were not
6 handling the product well, what did you do?

7 A I passed this down to Anniston. And this is in
8 connection, I would say, with arranging a visit for
9 Westinghouse. The fac- -- purpose of the Westinghouse
10 visit is to discuss our fac- -- with our factory people
11 the measures for handling 1242 to avoid problems with
12 dermatitis and toxic -- that's purpose of it.

13 Q Were you present at that meeting --

14 A No, I --

15 Q -- that took place?

16 A -- was not. I was not.

17 Q Now, you in your memo suggested that some other
18 topics could also be covered at the same time, didn't
19 you?

20 A I don't know. I could have.

21 Q Well, take a look and see if you didn't suggest
22 that.

23 A Well, what are -- where are you --

24 Q Well --

25 A Just to make it a fast --

1 Q -- you say, "In addition to the above, this
2 would be a good time for Jim Bryant to tell Westinghouse
3 about certain aspects of" --

4 A Oh, yes. Yes. Sure.

5 Q You thought you would get some additional good
6 out of that meeting besides just talking about safe
7 handling. Correct?

8 A Not we; that day might.

9 Q I see.

10 A I don't know if you want to explore this or
11 not. I -- I can tell you what it is.

12 Q Well, now --

13 A Yes. It was suggested that they be shown the
14 process that Bryant had recently developed for refining
15 PCB, which was a column versus a batch type.

16 Q In fact, that process that you'd developed for
17 improving electrical product was developed in 1967, was
18 it not?

19 A I would say at that -- about that point in
20 time, yes.

21 Q That was about the same time of the memo that
22 you wrote about the problems (tendering) with how the
23 qualities of Monsanto's PCBs stacked up against the
24 foreign competition, wasn't it?

25 A Well, it's purely incidental and happenstance.

1 Yes, the dates are the same, but --

2 Q And it's about --

3 A There is no -- there is no formal relationship
4 between the two.

5 Q It's the same -- it's about the same time
6 Mr. Miller wrote his report about the superior
7 properties of the German and Japanese PCB, isn't it?

8 A Yes, it is. Yeah.

9 Q In fact, didn't Monsanto undertake, after they
10 found out their PCBs weren't as good as the Japanese and
11 the German, to improve their process to get a
12 better-quality product?

13 MR. CRAWFORD: I object to the form
14 of the question.

15 A I --

16 MR. CRAWFORD: You used the word
17 "good."

18 A I object to the question, but --

19 BY MR. LACEY:

20 Q Can you answer the question?

21 A Pardon? What is it?

22 Q Isn't it true that after Monsanto discovered
23 the Japanese and the German were putting out a
24 better-quality PCB product, that Monsanto undertook to
25 introduce extra distillation capability to try to

1 improve the quality of its PCBs?

2 MR. CRAWFORD: Or res- -- res- --
3 resistivity?

4 THE WITNESS: Yes, resistivity.

5 A This is not the reason that they developed this
6 column, David. It is not the reason.

7 It is -- at this point in time, you must --
8 they're all dated. I agree to that. Of course, I do.

9 But this is not the reason Bryant set out,
10 specifically because there was any concern about the
11 quality of -- of our material. His column was a more
12 convenient and, he thought, a more efficient way of
13 handling this in batch filtering.

14 BY MR. LACEY:

15 Q Doesn't your memo say, "In addition to the
16 above, this would also be a good time for Jim Bryant to
17 tell Westinghouse of our experiences with upgrading
18 Aroclor 1242 through the use of Porocel. The efforts we
19 are making to arrive at higher electrical properties
20 should be related to Westinghouse so they will
21 understand the efforts we are making to provide
22 Westinghouse with the best possible quality"? Isn't
23 that what you said?

24 A Yes, this -- this is what I said, David.

25 Q And isn't it true that what Monsanto was doing

1 was trying to improve the quality of their product?

2 A We were always trying, David, to have the very
3 best quality. Now, I don't want this thing to go on
4 with any misconception. Our quality was very good. I
5 agree, David, we were always trying to improve this
6 quality.

7 Q Did you provide anybody in Monsanto's Medical
8 Department with the information about the bad handling
9 practices at Westinghouse?

10 A No. These are not medical people on here.

11 Q To your knowledge, did you ever tell anybody in
12 the Medical Department -- either Dr. Kelly, Mr. Wheeler,
13 Mr. Garrett, or anyone else -- about the types of
14 problems you knew existed at Westinghouse?

15 A Well, specifically, I do not recall; neither
16 was I the Product Manager. I was trying to arrange a
17 visit with Westinghouse. I was not in the Sales
18 Department organization. I was accommodating the
19 marketing salespeople with arranging to have the
20 customer come to Anniston. That was my role --

21 Q I see.

22 A -- in this.

23 Q And you don't know how --

24 A But I didn't -- I -- obviously, that didn't go
25 up to the Medical Department.

1 Q And you don't know how much time or effort was
2 devoted by the people at Anniston to telling
3 Westinghouse they needed to do better, do you?

4 A No. I was not there.

5 Q You had no idea whether they provided them with
6 any information above and beyond what was in the
7 Technical Bulletins do you?

8 A I wasn't there, David. I don't know.

9 Q The types of problems that you knew existed at
10 Westinghouse in 1967 included allowing PCB dielectric
11 materials to spill and soak into workmen's shoes and
12 clothing, without them changing the shoes and clothing.
13 Isn't that correct?

14 A That's what it says, yes.

15 Q That type of practice is bad practice, isn't
16 it?

17 A I -- to me, it sure is.

18 Q That's the type of thing that --

19 A And that needs to be looked at, and this is
20 what I was helping put under way --

21 Q I see.

22 A -- by arranging the meeting.

23 Q I see. Do you know if the problem was solved?

24 A If it hasn't, it sure should have been.

25 Q Did you ever check up on it to see if it got

1 fixed?

2 A I wasn't calling on Westinghouse. I think this
3 should be addressed to the marketing -- the product
4 group.

5 Q You just left it for somebody else to take care
6 of?

7 A This is addressed -- this is addressed to the
8 plant and the market people.

9 Q You -- you didn't ever see fit to follow up on
10 it?

11 A I never called McClain and said, "Well, now,
12 what did you do, or what came" -- I assume it was
13 corrected.

14 Q But you never checked --

15 A That was the --

16 Q -- to find out?

17 A -- purpose of the whole thing, wasn't it?

18 Q You never checked to find out?

19 A That wasn't my business, David.

20 Q You didn't even check to find out if the
21 meeting took place, did you?

22 A Do what?

23 Q You didn't even check to find out if --

24 A I may have been out of the country by the time
25 the meeting took place.

1 Q I see.

2 You were involved, were you not, in Monsanto's
3 policy to defend Aroclor?

4 A What?

5 Q You were involved, were you not, in Monsanto's
6 efforts and policies to defend Aroclor, were you not?

7 MR. CRAWFORD: Well, show him the
8 document.

9 A I don't understand. I --

10 BY MR. LACEY:

11 Q Let me show you a document dated December 9th,
12 1968, written by Dr. Richard to Ralph Munch, you and
13 Mr. Bryant, Mr. Heber, Mr. Sullivan, Mr. Thompson,
14 Mr. Wiest; Document 39204-205 (tendering).

15 You received that document, did you not?

16 A Yes. I was on the list here.

17 Q And that document dealt with an effort by
18 Monsanto to defend Aroclor and try to keep it in use,
19 did it not?

20 MR. CRAWFORD: Well, let him read the
21 document.

22 A (Reviews document.)

23 Well, this is by Bill Richard, the Director
24 of -- of Research, outlining a program.

25

1 BY MR. LACEY:

2 Q What was your role in the program to defend
3 Aroclor?

4 A I was on the sideline, David.

5 Q You didn't have anything really to do with it?

6 A I was not in line with any of this, no.

7 Q And did your efforts with the National
8 Electrical Manufacturers Association and the ANSI
9 group -- was that part of the program to defend Aroclor?

10 MR. CRAWFORD: I'm going to object to
11 the form of the question. You're assuming
12 there is such a program. He didn't know
13 anything about it.

14 BY MR. LACEY:

15 Q Now, we talked --

16 MR. CRAWFORD: He didn't know about
17 it.

18 BY MR. LACEY:

19 Q We talked in your earlier deposition about your
20 service as chairman of the National --

21 A No. You've got it wrong.

22 Q -- Manufacturers --

23 A I was -- I was chairman of the Steering
24 Committee.

25 Q That's right.

1 A I helped lay the egg, and I had nothing to do
2 with the workings of it.

3 Q You understand perfectly well --

4 A Oh, I think you understand; all right? I was
5 chairman of the Steering Committee that helped put this
6 thing together. Just like at Anniston there; I helped
7 put the meeting together. But I was not active at
8 Anniston. I was not the active one. I did help
9 organize the thing, David --

10 Q Right.

11 A -- yes.

12 Q And my question to you, and so we satisfy
13 Mr. Crawford's failure to recollect what you testified
14 to, you were --

15 MR. CRAWFORD: Object to that.

16 MR. LACEY: Well, it's true, Walter.
17 He testified to all that stuff in his
18 deposition. We're doing the continuation.

19 And my question to him is whether or
20 not his service with the National
21 Electrical Manufacturers Association group
22 and with the ANSI group was part of the
23 program to defend Aroclors.

24 MR. CRAWFORD: Well, you haven't
25 established with him --

1 MR. LACEY: Well --

2 MR. CRAWFORD: -- that he knows
3 anything about the program to defend
4 Aroclors, whatever that is. He was on
5 ANSI.

6 MR. LACEY: I'm trying to find out
7 if -- if his service was --

8 A Well, I was not active on this.

9 BY MR. LACEY:

10 Q I see. You didn't have anything to do with --

11 A We've already discussed I was sort of as a
12 satellite --

13 Q I see.

14 A -- satellite out here. I was aware of this,
15 yes; but I was not actively engaged.

16 1968. If you asked me where I was, it could be
17 some foreign land.

18 Q I see.

19 A But the -- the copy did come to my desk.

20 Q But --

21 A I didn't formulate the program. I did not do
22 any active work on the program.

23 Q Well, let me show you here a document dated
24 September 9th, 1969, Document 30840 through 30487 (sic),
25 also written by Mr. Richard to Mr. Wheeler, with copies

1 to various people. And I want to direct your attention
2 in particular to the fifth page of this document, 30844,
3 and to the sixth page of the document, 30845, where it
4 lists certain portions of the plan to defend Aroclors
5 and gives the name of the people responsible for it out
6 at the side (tendering). Do you see that?

7 A Yeah.

8 Q Your name shows up out there --

9 A Yeah.

10 Q -- as responsible for the actions.

11 A My name and Bryant. Bryant was in my area. He
12 was associated with me.

13 This is 1969. I may have been in Australia,
14 for all I know. But it came to Benignus/Bryant. Now,
15 what is it that -- oh, capacitor fluids.

16 Q And if you go to the next page --

17 A Yes, this would have been Benignus/Bryant,
18 addressed really to Bryant.

19 Q I see.

20 A I mean, David, at this time we were talking
21 about that thing in Australia. What date was --

22 Q Australia was 1967.

23 A '67. Well, this is what?

24 Q '69.

25 A '69. Well, I was active overseas. I'm merely

1 pointing that out.

2 Q Yeah.

3 A I may or may not have been there.

4 But on capacitors, it would have come to
5 this -- to the attention -- it wouldn't have come to
6 Kountz and Hodges, not the capacitors.

7 Q No. And you go to the next page. It talks
8 about transformers, and again --

9 A Yeah. I would say --

10 Q -- you and Mr. Bryant were responsible --

11 A Yes.

12 Q -- for that, were you not?

13 A Yes. It could have left my name out, but --
14 all right. I understand. It's Benignus/Bryant. We
15 were associated.

16 Q You all had a role to play in this program to
17 defend Aroclors, didn't you?

18 A Well, we were named here, yes, under this
19 section. I don't know what it says we were supposed to
20 do.

21 Q Well, it's listed right -- Dr. Richard --

22 A Well, I --

23 Q -- had this all lied out -- laid out --

24 A He did, yes.

25 Q And he had the --

1 A I didn't help him lay it out.

2 Q He just made the --

3 A Oh.

4 Q We're both talking at the same time, and that's
5 a no-no.

6 A All right.

7 Q Dr. Richard had this all laid out with who was
8 supposed to do what, and made specific assignments of
9 each job, didn't he?

10 A Yes.

11 Q And --

12 A That's what it is.

13 Q And you were on the list of people who were
14 assigned jobs to do?

15 A Yes.

16 Q Okay.

17 A Okay.

18 Yeah.

19 Q Let me -- that's really all the questions I've
20 got. You don't recall the details of your involvement
21 in this program, though?

22 A No.

23 Q I see.

24 A In fact, I was really not actively involved,
25 no.

1 Q Let me show you a document that was marked as
2 Deposition Exhibit No. 10 in the deposition of
3 Mr. Papageorge (tendering), and I want to direct your
4 attention specifically to the second and third pages of
5 that document and ask if those are the types of price
6 lists that Monsanto had for its various products.

7 MR. CRAWFORD: You better look at all
8 of it.

9 THE WITNESS: 1970.

10 MR. CRAWFORD: The first page, too.

11 THE WITNESS: Huh?

12 MR. CRAWFORD: Go on and look at the
13 whole thing, just so you can get oriented
14 here (indicating).

15 THE WITNESS: Aroclor plasticizers.

16 MR. CRAWFORD: You may not know it --
17 I don't know if you know anything about
18 that.

19 A That's not in my area, David.

20 BY MR. LACEY:

21 Q Well, my question has to do with whether the
22 price -- price list attached is the type of price list
23 that Monsanto used to put out on its various products.

24 A Well, up to the fourth decimal place?

25 Q They had price lists like that, didn't they, at

1 Monsanto?

2 A I've never seen this before.

3 Q I see. You've never seen that type of price
4 list?

5 A No, I wasn't in this area.

6 Q No, I'm not talking about that particular price
7 list. That one actually came out of the plasticizer
8 area --

9 A Yeah.

10 Q -- didn't it?

11 A Yeah.

12 Q And I'm asking whether they had price lists
13 like that, Monsanto did, for its various products,
14 including the PCB products that were used as dielectric
15 fluids.

16 A Oh, of course they had price lists.

17 Q Okay.

18 A Not -- not like this.

19 Q Well, what were the price lists like that were
20 used in the dielectric area?

21 A The salesmen had a -- what they called a price
22 book.

23 Q I see.

24 A It was a looseleaf thing about that like
25 (indicating).

1 Q Did it have printed sheets in it like that that
2 gave the --

3 A No, it wasn't in this form.

4 Q I see.

5 A And -- these operations are out to the fourth
6 decimal place.

7 Q Very accurate, aren't they?

8 A My gracious. Mils.

9 MR. CRAWFORD: Okay.

10 A Tenths of a mil. I -- I don't know. I -- I --
11 I just don't know. "Price and shipping information." I
12 don't know that this is the kind of thing that --
13 "Aroclor, a new" -- "Dear Customer."

14 Boy, they sure gave themselves out to the --

15 MR. CRAWFORD: Well, don't --

16 A See, these things were very -- I don't know. I
17 wasn't in the area.

18 BY MR. LACEY:

19 Q I see.

20 A I can read it.

21 MR. LACEY: Would you mark this as
22 the next exhibit, or I guess the first
23 exhibit. I'm not sure what exhibit number
24 it is. I don't remember if we marked
25 anything in the earlier part of the

1 deposition or not.

2
3 (Deposition Exhibit Benignus 1 marked
4 for identification, and discussion off the
5 record)

6
7 BY MR. LACEY:

8 Q Mr. Benignus, let me show you what's been
9 marked as Deposition Exhibit Benignus 1, and it's dated
10 today as the continuation date (tendering).

11 A Uh-huh.

12 Q That's a price list for electrically-applied
13 PCB products, is it not?

14 A Yes. Yes, it is.

15 Q It shows the prices that the various products
16 were sold at, when they started being sold, and when
17 they were discontinued in the 1970's, does it not?

18 A Well, it starts '71.

19 Q I'm sorry; '71.

20 A And it runs down to '76. Yes, it has that
21 numbers on there.

22 Q Is that price list accurate with regard to when
23 Aroclor 1016 started into commercial sale; that it
24 wasn't on commercial sale on January 1, 1971?

25 A Well, that's what it says, and I think that was

1 right. I think we more or less hit that number in there
2 earlier.

3 Q All right. I just -- well, I just -- we didn't
4 have this document to look at, and I just --

5 A No, we didn't.

6 Q -- wanted to make sure.

7 A But it says, "Not marketed on January." It
8 wasn't marketed then. April, it had a price.

9 Q Okay.

10 A I -- yes.

11 Q Now, that price list, if you can look at it
12 there --

13 A Yeah.

14 Q -- shows that Aroclor 1016 came on the market
15 by April 1st, 1972.

16 A Right.

17 Q Right?

18 A Right.

19 Q It also shows that Aroclor 1242 --

20 A Was discontinued.

21 Q -- was discontinued. And that, of course, was
22 the -- you didn't sell Aroclor 1242 after you started
23 selling 1016. Is that --

24 A I would say so. And this brings to mind, I
25 think in our previous -- you were asking the same

1 question, and I think you got me a little bit confused.

2 Q I see.

3 A The 1016 came on the market. We
4 discontinued -- you worded your question in a way
5 that -- that sort of got me to give you an answer that
6 wasn't exactly right. I think I told you that --

7 MR. CRAWFORD: He's good at that.

8 THE WITNESS: It was what?

9 MR. LACEY: You know, I just asked
10 him, Walter.

11 A He only asks them, but, boy, you can confuse.

12 Let me say this, David: This is correct
13 (indicating).

14 BY MR. LACEY:

15 Q Okay. This document --

16 A This was that 1242 was discontinued.

17 Q Okay.

18 A I think I told you -- you said if somebody
19 insisted and wanted 1242, would we supply 12- -- and
20 I -- I may have said "yes," David.

21 Q And is the answer now that you would not have?

22 A That's right.

23 Q I see.

24 A Let us correct it. We would not want to have a
25 lame, limp product that we had to have separate storage

1 and separate this -- it -- it's uneconomical.

2 Q So --

3 A Yes, let's go over this.

4 Q Okay. So when you switched over from 1242 to
5 6- -- 1016, either people made the switch or they did
6 without. Correct?

7 A Yes.

8 Q Okay. Now --

9 MR. CRAWFORD: Before we leave this,
10 are you sure that that's the correct date
11 on the 1016? I mean --

12 A Well, that -- this is what it says. You know.
13 I didn't formulate this.

14

15 (At this point in the deposition,
16 Mr. Jones and Mr. Garrett entered the
17 deposition room and there was a
18 discussion off the record, following which
19 discussion Ms. Olesen, Mr. Jones and
20 Mr. Garrett left the deposition room)

21

22 BY MR. LACEY:

23 Q Now, this --

24 MR. CRAWFORD: This isn't a Monsanto
25 document, is it?

1 MR. LACEY: Well, actually, I think
2 it is a Monsanto document; not one
3 supplied to me, however.

4 BY MR. LACEY:

5 Q Now, this shows that there were different
6 prices, depending on whether people bought it by --

7 A Right. Sure.

8 Q T -- what is T/ --

9 A Tank car.

10 Q T/C. And what it is T/T?

11 A Tank truck.

12 Q Okay. So if people bought it by a tank car or
13 a tank --

14 A Bulk.

15 Q -- truck --

16 A Bulk.

17 Q Bulk. -- they got a lower price than if they
18 bought it in smaller quantities?

19 A Yes.

20 Q And so this chart shows, then, depending on how
21 much you bought --

22 A Yes.

23 Q -- you paid less, the larger you bought?

24 A You paid more -- yeah, the less amount you
25 bought; yeah.

1 Q And that was typical. If you bought -- bought
2 a real small container, you paid the highest price; if
3 you bought it in a tank car, you paid the lowest price?

4 A Correct.

5 Q And it was sold in -- it looks like tank cars
6 or tank trucks.

7 A Yes.

8 Q What is T/L drums?

9 A Truckload drums.

10 Q Okay. So if you bought a -- if you bought a
11 whole truck full of drums, you got that price?

12 A No. LTL is what? Less truckload.

13 Q Less than a truckload of drums?

14 A Yeah. Right. And then this is --

15 Q Five gallons --

16 A -- five gallons.

17 Q -- is a pail?

18 A Yeah.

19 Q So the way I could get PCB, I could get it in a
20 five-gallon pail. Correct?

21 A Every one of them.

22 Q And I could get it in a drum. And a drum what;
23 was a 55-gallon drum?

24 A Yes. It was a 55-gallon drum.

25 Q And if I bought one of them, I paid one price;

1 but if I bought a truckload of them, I paid a lower
2 price. Correct?

3 A Uh-huh.

4 Q And then if I bought it in a tanker truck, just
5 the whole truck full --

6 A Right.

7 Q -- or a railroad car, the whole car full, I got
8 a lower price?

9 A Yes. Right.

10 Q Now, this chart also shows that the price went
11 up through the years. Is -- is that --

12 A Yeah.

13 Q -- the way things happened?

14 A And the business went to hell.

15 Q Okay. What do you mean by that?

16 A Huh? We -- you're talking about 197- -- what
17 is it? -1?

18 Q '71.

19 A At this point, haven't -- hasn't this been
20 discussed?

21 Monsanto had been out of the nonelectrical --
22 they lost all of that, and they were spending a lot of
23 money with the environmental situation, and it wasn't
24 the same business.

25 Q And was the first --

1 A And their costs went way up.

2 Q Was -- was the price going up in part to cover
3 the environmental problems and the like?

4 A They had -- somewhere we -- we read in
5 something I just looked at that the costs of the
6 business went skyrocketing. It had been a very
7 hardnosed economic thing through the years, very
8 orderly; and all of a sudden, the bottom fell out. And
9 this accounts for this -- this level of fluctuation.

10 Q And is that why the price increased, as shown
11 on Benignus Exhibit No. 1; because the -- the business
12 went badly?

13 A Very, very much so; yes. Now, I wasn't running
14 out the economics and so on and so forth. I know the
15 business. We lost over half of the business. And that
16 makes a big economic difference.

17 Q Do you --

18 A There was no longer the business I was
19 accustomed to, David.

20 Q You didn't have anything to do with setting the
21 prices?

22 A Not at this time.

23 Q Did people just provide you with a price sheet
24 like this and say, "These are the prices"?

25 A Yeah, but I wasn't really in -- in the

1 marketing -- I wasn't in the sales end of it, really.
2 But that's what it would have been, that "These are the
3 prices." And I had nothing to do with it at this time.

4 Q Okay.

5 A I did through the years when GE set the prices.

6 Q GE used to set the prices?

7 A You better believe it.

8 Q Okay.

9 Let me show you a document, 35420 through
10 35488, that comes out of the Development Department and
11 is titled "Liquid Dielectrics and Aroclor, a Market
12 Survey," by John S. Harris in August of 1956
13 (tendering). Do you know Mr. Harris?

14 A Yeah, I knew Mr. Harris.

15 Q Did he work with --

16 A No. He worked with me years before this.

17 Q Was he familiar with the PCB dielectric market?

18 A In a general way, he would have been familiar;
19 yes.

20 Q Did you see --

21 A He wasn't active in this; but in a general way,
22 yes.

23 Q Did you see that report back when Mr. Harris
24 wrote it in 1956?

25 A I think I probably saw it. I don't know if --

1 yeah, it came to me.

2 Q Did you contribute to it?

3 A I may have furnished him with some background
4 things. I don't remember. Ac- -- I did not work
5 actively on this. He did this independent of me.

6 But that doesn't mean I didn't contribute
7 something. I would have probably contributed this
8 (indicating) to help him out, this -- this composition
9 and things like that. I don't mean to say I didn't
10 contribute anything, but he did this quite much on his
11 own.

12 Q Okay.

13 Let me show you another document.

14 Well, before I go away from that, is there any
15 reason that you would think that that isn't an accurate
16 document setting forth the situation in the market?

17 A I have no reason -- I haven't read it. I -- I
18 just don't know. But I -- I know Harris. I know what
19 he was -- he was making a survey. And, offhand, he's a
20 good man.

21 Q You read it back at the time you got it, didn't
22 you?

23 A I think I would have read it.

24 Q Do you recall any problems with it that you saw
25 at that time?

1 A None that I took active --

2 Q Let me show you another document, and --

3 A But I don't know what's in there, if there's
4 any --

5 Q And we don't really have time to sit and read
6 all the pages of it right now, do we?

7 A No, we've done enough.

8 Q Let me show you another document titled "Review
9 of Transformer Askarel," dated July 1962, Document 42271
10 through 42272. And that doesn't have an author on that
11 document (tendering). Did you write that document?

12 The reason I --

13 A 1962.

14 Q The reason I asked if you wrote it, it kind of
15 reads like your -- your writing style.

16 A Like I would say things, huh?

17 Q That's what it seems like to me.

18 A Yeah, I see -- okay, David.

19 Q Did you write it?

20 A I would think so.

21 Q Looks like your writing style to you, too,
22 doesn't it?

23 A Yeah.

24 Q Okay. Is that document accurate, setting forth
25 the way things were back in 1962 and the history leading

1 up to then?

2 A (Reviews document.)

3 There are things in here that I'm pointing out
4 that would be in the vein or flavor, yes.

5 Q Okay.

6 Let me show you another document entitled
7 "Aroclor/Santotherm Sales Report in 1968," Document
8 29119 through 29122, and ask if in particular the
9 information in here regarding dielectric applications
10 would have come from you (tendering).

11 A Aroclor/Santotherm.

12 (Reviews document.)

13 Gosh, it's in Japanese, isn't it? Is that what
14 you're referring to?

15 Q No. I'm just wondering if the information in
16 there would have --

17 A From me specifically?

18 Q Yes. -- come from you.

19 A No, it wouldn't have come from me
20 specifically --

21 Q Okay.

22 A -- on this, no.

23 Q All right.

24 Let me show you another document written
25 November 6th, 1969, regarding "New Dielectric Fluids"

1 from Dr. Munch to Dr. Richard, with a copy to you
2 (tendering). Did you did you receive a copy of that
3 document?

4 A I'm on the list, so it would have come to me
5 through the mail.

6 Q Let me show you another document, also from
7 Dr. Munch to Dr. Richard, dated December 5th, 1969,
8 regarding "Future Posture-Dielectrics," with a copy
9 shown to you (tendering). Did you receive a copy of
10 that document?

11 A Yeah, it says I did. They copied me in on
12 everything.

13 Q You were still involved in that period of time
14 in the dielectric business, were you not?

15 A This is '69? Yes.

16 Q Yes.

17 A Yeah.

18 Q Let me show you another document dated February
19 2nd, 1970, called "The Transformer Askarel Fluid
20 Market," written by Donald R. Pogue, Document 27924
21 through 28017 (tendering). Did you see that document?

22 A I heard of this.

23 Q Who was Mr. Pogue?

24 A He was a man in -- what in the world was he?
25 What's the date on this thing? '70. He was -- I'm

1 trying to do my best here.

2 I know -- I know Don Pogue. He was in a group
3 around there, and he did a survey or -- or did something
4 here, and put this together.

5 Q Mr. Pogue was a Monsanto employee?

6 A Yes, he was.

7 Q Did you assist him with information for his
8 study or work?

9 A I don't think I did. No, I don't think so.
10 I --

11 Q Did you see Mr. Pogue's work at about the time
12 he published it?

13 A Well, I got a copy, I would think, didn't I?
14 Yeah; a copy after -- after he put it together. I
15 didn't see it while it was being put together.

16 Q Did you find anything in there that you
17 disagreed with when you saw it?

18 A I -- I --

19 MR. CRAWFORD: Well, continue to read
20 it.

21 A Well, I can't --

22 BY MR. LACEY:

23 Q We don't have time for you to read a hundred
24 pages.

25 A No.

1 Q I'm trying to find out if there were things in
2 there when you got the document you thought Mr. Pogue
3 was just wrong about.

4 A I --

5 MR. CRAWFORD: Well, that's not
6 specific. Objection.

7 A I had no control over Mr. Pogue, David.

8 BY MR. LACEY:

9 Q Well, I understand that. What I'm trying to
10 find out is: You --

11 A There was -- there was no concerted action I
12 took one way or another. I wasn't asked to. This was
13 done completely independent of me, and --

14 MR. CRAWFORD: Well, you just can't
15 recall at this point, can you, the details
16 of --

17 THE WITNESS: No, I couldn't
18 possibly.

19 BY MR. LACEY:

20 Q Well, let me ask you --

21 A I didn't run up and down, you know, yelling
22 about anything or complimenting -- I was neutral on
23 this. It wasn't my -- my -- I didn't ask for this.

24 Q Well, were you concerned with whether or not it
25 was factually accurate or not?

1 A I had no say-so over Mr. Pogue.

2 Q No, I understand. But you got a copy of the
3 document.

4 A Yes, I did. It says so.

5 Q It went to some pretty important people there
6 in Monsanto, including Mr. Bergen, didn't it?

7 A Yeah.

8 Q Now, had you read the document and found it had
9 substantial inaccuracies in it, it would have been your
10 job to report that to your superiors, wouldn't it
11 (tendering)?

12 A Yes.

13 Q And that would have been Mr. Olsen and
14 Mr. Bergen, wouldn't it?

15 A Munch, Richard; Davis would be -- Davis was on
16 this. There were people here more accurately concerned
17 than myself about about inaccuracies, I would say, if
18 there were. I -- I don't know. I -- I don't know what
19 we're driving at, David. I did not take direct action
20 that I remember (tendering).

21 Q On Page 27934, Mr. Pogue says, "Our most
22 significant problem is the utilities' reluctance to
23 expose personnel and customers to Askarel fumes and
24 irritation. This has resulted from several widely
25 publicized explosions and from frequent bothersome

1 transformer leaks."

2 And do you agree with what Mr. Pogue had to say
3 there?

4 A There were not frequent exposures.

5 Q Okay.

6 A If you will look at the Edison Electric
7 Institute, their report on the incident of primary
8 failure, which is an expression of explosion, it is
9 very, very low. It's the order of a few hundredths of a
10 percent in an operating year.

11 So I'd say he's wrong about that part of it.
12 Now, there can be other things, David.

13 Q I see.

14 MR. LACEY: Why don't we change the
15 tape.

16
17 (Recess)

18
19 THE VIDEOTECHNICIAN: We've been off
20 the record for a moment to change the
21 tape. We're now back on the record. The
22 time is 2:52 p.m.

23 BY MR. LACEY:

24 Q Mr. Pogue indicates at Page 27935, "We must
25 address ourselves to frequent utility technical service

1 visits to neutralize emotions on Askarel's toxicity and
2 handling."

3 Do you agree that that was a necessary program
4 of Monsanto?

5 A It had not been. This is his point of view.

6 Q Did you agree with it?

7 A I would -- I -- I don't disagree with this.
8 What's the date on his thing?

9 Q February 1970.

10 A 1970?

11 Q 1970.

12 A Well, I don't disagree with that. I did that
13 myself, David.

14 MR. CRAWFORD: What was the question,
15 now?

16 MR. LACEY: Whether he agrees with
17 that approach of going out and meeting
18 with these utility people.

19 BY MR. LACEY:

20 Q Do you agree?

21 A David, I did that.

22 Q On Page --

23 A So I agree with it.

24 Now, I didn't write this. I didn't tell Pogue
25 to write that, but --

1 Q I understand.

2 A -- I did that kind of work.

3 Q I understand.

4 A I called on a lot of utilities.

5 Q He goes on --

6 A He's agreeing with what I did.

7 Q I see.

8 He goes on to say on Page 27939, "Only through
9 increased personal contact with utilities and industry
10 can we expect to improve our market position and
11 maximize Monsanto's new opportunities."

12 Do you agree with that?

13 A I won't disagree with it, no.

14 Q Okay.

15 MR. CRAWFORD: This is 1970?

16 MR. LACEY: This is 1970.

17 A Yeah. I was -- I was no longer active, but --

18 BY MR. LACEY:

19 Q He -- he goes on --

20 A He arrives at what I was doing.

21 Q He -- he goes on to say, "To produce results
22 and improved image and to gain in-depth market
23 understanding, personal contact annually with a
24 estimated 50 to 100 large firms in our diverse
25 industrial market and to about 25 larger investor-owned

1 utilities is required."

2 A Oh, that's remarkable.

3 Q You agree with that?

4 A Yes. I was trying to do this, David.

5 Q Okay. So he recommends exactly what you were
6 doing?

7 A Yes, he sure does.

8 Q All right.

9 A I called on a lot of utilities, I called on a
10 lot of industrial places, and I was very active in that
11 at one period of time.

12 Q I see.

13 MR. CRAWFORD: That was back in the
14 '60's. Is that correct?

15 THE WITNESS: Yes. I was active in
16 this in the '60's. Maybe he heard about
17 it, and that's why he's writing this.

18 MR. CRAWFORD: Well, don't speculate
19 about something that --

20 THE WITNESS: Yeah. I -- I'm sorry.

21 BY MR. LACEY:

22 Q Mr. Pogue indicates at Page 27959 that the
23 market share -- and he's talking about transformer uses
24 for Askarel transformers -- he says that "our market
25 share of 20 percent does not appear stable."

1 He goes on to say, "Contacts with utilities
2 indicate that during recent years because of larger
3 multi-story buildings, inside basement network vaults
4 and upper floor networks are becoming increasingly
5 popular. Unfortunately, dry types or upper floor
6 service are preferred (weight and Askarel's installation
7 cost), and often oil is used inside because utilities
8 feel Askarel must be vaulted anyway (fear of explosion
9 and fumes)."

10 Do you agree with those concerns he had about
11 Monsanto's market for PCB transformers?

12 A In a way, I agree. But there's more to it,
13 this story, than that.

14 If one wishes to handle this subject, you must
15 also concede that a dry-type transformer will blow and
16 create a lot of fumes and problems.

17 I don't disagree with what he says. What he
18 says is not a complete assessment --

19 Q I see.

20 A -- is what I'm saying, David.

21 Q He goes on with regard to talking about the
22 attitude on Page 27965 and says, "Askarel's image with
23 the utilities contacted in this study was entirely
24 unsatisfactory. Many have reluctantly used and lived
25 with Askarel fluid for years because they have had

1 little choice when safety from fires is required."

2 Do you agree with that?

3 MR. CRAWFORD: This is in 1970, now.

4 A This -- I was not active any more at this time.
5 He is pointing out a very fundamental concept of the
6 Askarel transformer, its fire-resistance. I have to
7 agree with that. That's the reason for its being.

8 BY MR. LACEY:

9 Q Do you agree that Askarel's image with
10 utilities is entirely unsatisfactory and that they have
11 only reluctantly lived with Askarel transformers?

12 MR. CRAWFORD: In 1970.

13 A I didn't call on them in 1970. I called on
14 many utilities earlier.

15 It was a judgment by the head engineer at the
16 utility. He either favored Askarel and was almost 100
17 percent Askarel, or he went the other way and went dry
18 type. It was a judgment matter by the individual.

19 Now, if he called on only people who favored
20 Askarel, he'd get one point of view. If he called on
21 people who didn't, he'd have another. Now, I don't know
22 who he called on, David.

23 BY MR. LACEY:

24 Q Some utilities did everything in their power to
25 avoid using PCBs transformers, didn't they?

1 A And some did everything in their power to use
2 it.

3 Q Can you answer the question I've asked?

4 A I'm sorry.

5 Q Some utilities did everything in their power to
6 avoid using PCB transformers, didn't they?

7 A I don't know. Let me put it this way: Some
8 utilities did not use, did not have Askarel
9 transformers. It was their flavor and judgment to use
10 dry type. I'm talking about utility networks.

11 Now, in some other areas, it was absolutely the
12 opposite.

13 You didn't have a mixture, is what I found.
14 Either you were on one side, or you were on the other
15 side, David.

16 Q He goes on to say on Page 27966, "Askarel's
17 basic problem is one of toxicity and handling. Workers
18 do not like the fluid because it irritates the skin, and
19 residual Aroclor 1260 is sticky and difficult to remove
20 from spills, leaks and inside arc to transformers.

21 "This situation is felt in the marketplace.
22 Consolidated Edison, who controls about 45 percent of
23 the entire network transformer market, has chosen to
24 absolutely minir- -- minimize Askarel in either:
25 1. Networks outside or inside buildings; 2. Substation

1 unit for generating plants, due to a record of several
2 lawsuits from explosions in Askarel units. In one case
3 two people died in the HCl fumes, and in the other case
4 two -- in the other two cases, fumes caused adverse
5 feedback from the building occupants.

6 "United Electric and Virginia Electric and
7 Power Company began phasing Askarel out of their network
8 systems following similar conditions of fumes resulting
9 from an explosion that created adverse publicity."

10 Do you agree with those statements?

11 A Those things must have happened.

12 MR. CRAWFORD: Do you know anything
13 about that?

14 THE WITNESS: No, I never read this
15 until now.

16 MR. CRAWFORD: Well, don't agree with
17 it unless you know about it.

18 BY MR. LACEY:

19 Q Do you have any reason to believe the situation
20 that Mr. Pogue is reporting to Monsanto in this Monsanto
21 document is not true?

22 A I do not, no.

23 Q There's no reason for him not to be truthful
24 about it, is there?

25 A That's right.

1 MR. CRAWFORD: But you don't know the
2 facts?

3 THE WITNESS: I don't know the facts.
4 I called in these areas ten years before.

5 MR. CRAWFORD: Okay.

6 A Now, he's mentioning Virginia Electric and
7 Power. They were very heavy on Askarel transformers.
8 Now, he goes ten years later and probably meets
9 different people.

10 MR. CRAWFORD: Well, don't testify
11 to something -- about something you don't
12 know anything about.

13 THE WITNESS: I'm not testifying
14 on -- on this. I've answered Mr. Lacey's
15 question.

16 BY MR. LACEY:

17 Q The -- if, in fact, Virginia Power was very
18 high on Askarel transformers in the 1960's, apparently,
19 if Mr. Pogue is not being untruthful, they strongly
20 changed their position after they had some problems with
21 them. Isn't that correct?

22 MR. CRAWFORD: Object to the form.

23 Do you know? Tell him what you know.
24 If you know anything about it, tell him.
25 If you don't --

1 THE WITNESS: All I know is what
2 David, Mr. Lacey, is -- is reading.

3 A And I -- I have to say Pogue was an honest man,
4 which is what you said.

5 BY MR. LACEY:

6 Q Okay. You don't have any question about his
7 honesty, do you?

8 A No.

9 Q Or his competence to do a study like that --

10 A No.

11 Q -- and -- and put together on accurate report?

12 A No. He's doing his best.

13 Q Okay.

14 MR. CRAWFORD: But you personally
15 don't know anything about the facts?

16 THE WITNESS: I wasn't there when --

17 MR. CRAWFORD: Okay.

18 THE WITNESS: -- whenever he's
19 talking about.

20 BY MR. LACEY:

21 Q Now, you spent a lot of time out of the United
22 States --

23 A Yes, I did.

24 Q -- after sometime in the '60's or early '70's.
25 Correct?

1 A Well, why are you smiling?

2 Q Well, I'm just --

3 A Yes, you're right; a great deal of time.

4 Q I smile -- I don't know; I guess I need to stop

5 smiling.

6 A No.

7 Q People seem to be concerned when I smile.

8 A No. You can smile.

9 Q Okay.

10 In that connection, did you ever get to Japan?

11 A Yes.

12 Q Did -- now, over there in Japan, Monsanto had a

13 joint venture with Mitsubishi to produce PCBs, did they

14 not?

15 A Yes.

16 Q Did you learn about the Japanese problems with

17 PCBs -- and I'm talking particularly now about the Yusho

18 incident -- when you went to Japan?

19 A No. I was before that.

20 Q I see. Did you keep up with the situation in

21 Japan after that occurred as a part of your world

22 interest?

23 A No, I did not.

24 Q I see. You don't know anything, then, about

25 when Japan decided to ban the use of PCBs?

1 A Yes, I do.

2 Q Okay. Well, I'm sorry. I -- that -- that's
3 what I was leading to. Well, when -- when did the
4 Japanese decide to ban the use of PCBs?

5 A Let me think a bit.

6 I think -- and this is by memory -- I think it
7 would probably have been sometime in 1968. It's in that
8 period, as best I can remember.

9 Q Okay. And they stopped at that point using
10 PCBs for any application --

11 A Yes.

12 Q -- did they not?

13 A Yes.

14 Q Did they have any substantial problems with
15 their electric system that you recall?

16 MR. CRAWFORD: If you know.

17 A None that I know of.

18 BY MR. LACEY:

19 Q Okay.

20 A No.

21 May I make a comment on the last thing, David?

22 Q Well, what would you like to comment on?

23 A I would like to tell you something you probably
24 don't know.

25 Their electric system was much different than

1 ours. At this point of time, David, the Japanese were
2 just coming around to sort of adopting our way of using
3 capacitors is what I'm driving at. They had an
4 altogether different arrangement. The systems weren't
5 similar in terms of what we're talking about.

6 Q I see.

7 I don't think, when I took your deposition
8 previously, I had time to ask you about the occasions
9 when you had been deposed before. How many times have
10 you been deposed before?

11 A I know of one.

12 Q What was that?

13 A That was over the telephone.

14 Q Was it a deposition where you were sworn in and
15 all that sort of thing?

16 A Over the telephone.

17 Q Were you sworn in?

18 A I'm not being facetious.

19 Q You were -- were you --

20 A Do you believe me, David?

21 Q I believe you. I believe you.

22 A Well, you'd better. I was sworn in over the
23 telephone. There was a snowstorm.

24 May I laugh?

25 Q What -- what did that have to do with?

1 A Because we couldn't get together here in a
2 room.

3 Q Right.

4 A And they wanted to proceed, and the snow was so
5 thick we couldn't get together, and I sat on the
6 phone --

7 Q Okay.

8 A -- and talked to them, David.

9 Q Okay. What -- what did that involve, that
10 deposition?

11 A That involved a case in Texas; in Greenville,
12 Texas.

13 Q Greenville?

14 A Yes.

15 Q Did it involve PCBs?

16 A Yes.

17 Q What -- what happened in that case; what the
18 facts were? Do you know?

19 A It was a transformer maker.

20 Q They made them in Greenville, Texas?

21 A Yes, they did.

22 Q And -- and were they suing somebody, or were
23 they being sued by somebody, or --

24 A They were being sued. Well, now, wait a
25 minute. I don't know if they were being sued. The EPA

1 was after them.

2 Q I see. They had some pollution problems?

3 A Yes, they had pollution problems. This is it.

4 Q And you testified in that regard?

5 A This is right.

6 Q Is that the only case you ever recall giving a
7 deposition in before?

8 A No. There's a second one. Now -- this was --
9 was Jacksonville, Florida.

10 Q The second one?

11 A Yes. In fact, that was the first one. It
12 doesn't matter. They were close together.

13 Q Right. What was the Jacksonville, Florida --

14 A The Jacksonville, Florida, was a situation
15 where there was a high-rise office building, relatively
16 new. And they were fitted with Askarel transformers.

17 And a consultant came by, and -- this was, now,
18 after 1978, the environmental situation -- and the
19 consultant said, "Those are Askarel transformers. Take
20 them out."

21 They did this. They did not have to do this,
22 but they did it. So they incurred considerable expense
23 doing it, and they wanted their money back. It was an
24 unfortunate decision they made at that point in time.
25 The transformers had caused no trouble. They were

1 running perfectly, nicely, normally. And they made this
2 change-out and caused themselves a lot of expense, and
3 they wanted their money back.

4 Q And who were they -- who were they suing?
5 Monsanto or --

6 A No. They were suing General Electric Company.

7 Q And -- and you were testifying on behalf of
8 General Electric --

9 A Yes, really; yes.

10 Q -- that it wasn't necessary to do that, to
11 change them out?

12 A Well, I know they didn't have to do that. This
13 is correct.

14

15 (At this point in the deposition, a
16 hotel employee interrupted the deposition
17 to give a message slip to Mr. Lacey, and
18 then left the deposition room)

19

20 BY MR. LACEY:

21 Q Are those the only two times that you have
22 testified?

23 A That's the only two times.

24 Q You've never testified at trial?

25 A No.

1 Q This event where the transformers were changed
2 out in Jacksonville: Was that after 1970?

3 MR. CRAWFORD: '78, he --

4 A Oh, yes. Yes.

5 MR. CRAWFORD: '78, he said.

6 BY MR. LACEY:

7 Q It was 1978?

8 A I believe so.

9 Q I'm sorry. I thought you said it was around
10 1970. I wasn't sure.

11 A Oh, I said it was after the 1970 environmental
12 thing got going.

13 Q Yes. And I was trying to find out the year.

14 MR. CRAWFORD: '78.

15 BY MR. LACEY:

16 Q You think it was '78?

17 A I don't know. I guess something like -- I
18 really don't know. I -- if I knew, I'd tell you, David.

19 Q Okay. You just know it was sometime after
20 1970?

21 A Oh, yes; after the environmental thing.

22 Q Okay. Do you know whether or not the
23 consultant who suggested the transformers be changed out
24 was concerned about these explosions with Askarel
25 transformers?

1 A He was not, to my knowledge. No, sir.

2 Q What was the basis for his --

3 A The environmental.

4 Q I see. And you don't believe that the problems
5 with the explosions of Askarel transformers contributed
6 to that recommendation at all?

7 A To my understanding, not at all.

8 Q Okay.

9 A The transformers gave perfectly good service.

10 Q Well, I guess that wasn't really my question.
11 The question was whether or not he -- you knew whether
12 he had heard about these explosions --

13 A No.

14 Q -- that Mr. Pogue mentioned?

15 A No, David, he had not.

16 Q I see.

17 A I'm quite sure of this. It was an
18 environmental thing that caused this premature phase-out
19 or move-out.

20 Q Okay.

21 MR. LACEY: I will pass the witness
22 at this point.

23 MR. CRAWFORD: Okay. Well, we'll
24 reserve our questions.

25 Thank you.

(Discussion off the record)

THE VIDEOTECHNICIAN: This concludes
the deposition of Mr. Benignus. The time
is 3:12 p.m.

1 THE STATE OF _____ *

2 *

3 COUNTY OF _____ *

4
5 I, PAUL G. BENIGNUS, hereby certify that I
6 have read the foregoing transcript of my testimony given
7 in the foregoing numbered and styled case, and that same
8 is true and correct to the best of my knowledge and
9 belief.

10 I further certify that any and all
11 corrections have been made on a separate page and
12 attached hereto.

13 SIGNED on this the _____ day of _____,
14 1987.

15
16 _____
17 PAUL G. BENIGNUS

18 SWORN TO AND SUBSCRIBED BEFORE ME on this
19 the _____ day of _____, 1987.

20
21
22 _____
23 Notary Public
24
25

1 THE STATE OF TEXAS *

2 COUNTY OF HARRIS *

3
4 I, LINDA C. BAKER, a Certified Shorthand
5 Reporter, hereby certify that the foregoing testimony
6 was given before me after the Witness had been first
7 duly sworn.

8 I further certify that I prepared this
9 transcript and that the foregoing 135 pages constitute a
10 complete and correct copy of the transcript of the
11 proceedings, and that the original is being given to the
12 attorney taking same, to be filed by him if necessary.

13 I further certify that I am neither attorney
14 for, related to, nor employed by any of the parties to
15 the lawsuit in which this deposition was taken; further,
16 I am neither related to nor employed by any attorney of
17 record in this cause, nor do I have a financial interest
18 in the matter.

19 GIVEN UNDER MY HAND AND SEAL OF OFFICE in
20 Houston, Texas, on this the 11 day of June, 1987.

21 
22 LINDA C. BAKER, CSR, RPR

23 Certification Number: 505
24 Date of Expiration: December 31, 1988
25 Address: 2900 Smith Street, Suite 104
Houston, Texas 77006
Phone: 713/523-3767

LAWYER'S NOTES

	Page	Line
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

NELL MC CALLUM & ASSOCIATES, INC.

HARTOLDMON0019677