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1 IN THE DISTRICT COURT OF THE UNITED STATES
 2 FOR THE EASTERN DISTRICT OF TEXAS
 3 BEAUMONT DIVISION

4 -----
 5 CECIL SCOTT, ET AL :

6 V. :

7 MONSANTO COMPANY :

 : C.A. NO. B-84-1103-CA
 8 -----

9
 10 VIDEOTAPED DEPOSITION OF
 11 PAUL GEORGE BENIGNUS
 12 VOLUME II

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 16
 17 April 21, 1987
 18 Gilpin, Pohl & Bennett
 19 1300 Post Oak Boulevard, 24th Floor
 20 Houston, Texas

21
 22
 23 Cheryll K. LeFevers
 24 Texas CSR No. 1690/Notary Public
 25 Nell McCallum & Associates
 2900 Smith, Suite 104
 Houston, Texas 77006

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Videotaped deposition of PAUL GEORGE
BENIGNUS, Volume II, a witness called by the
Plaintiffs, on April 21, 1987, at the offices of
Gilpin, Pohl & Bennett, 1300 Post Oak Boulevard,
24th Floor, Houston, Texas, commencing at 9:30 a.m.,
before Cheryll K. LeFevers, CSR No. 1690 and Notary
Public in and for the State of Texas, pursuant to
Notice and Subpoena and the Federal Rules of Civil
Procedure.

I N D E X

WITNESS: PAUL GEORGE BENIGNUS

EXAMINATION BY:

PAGE

Mr. Lacey

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P R O C E E D I N G S

THE VIDEOGRAPHER: We are now continuing the deposition of Mr. Paul Benignus. The time is 9:35 a.m.

PAUL GEORGE BENIGNUS,
having been previously duly sworn, testified as follows:

EXAMINATION BY MR. LACEY:

Q. Mr. Benignus, last night as we stopped your deposition -- actually yesterday afternoon, I guess it was, a little after 5:00, we went through a group of documents by just identifying number that I wanted to have you review and see if you can help us learn something about them.

Did you have a chance last night to take a look at some of these documents to see what I was interested in?

A. We looked at all we had --

Q. Okay.

A. -- which was a large number.

Q. Okay. You did find most of them?

A. Oh, yes.

1 Q. Let me -- I've tried to group these
2 together as we go through them --

3 A. Right.

4 Q. -- in categories, and I want to talk about
5 individual documents. The first one I'd like to
6 show you is the document numbered 1519 through 1528
7 and ask if you can identify that document for me.

8 A. Yes. The subject is "The Aroclors." This
9 lists the Aroclor compounds that were made. It
10 lists Swann Chemical at -- the plant is at Anniston,
11 Alabama. This is Swann Chemical.

12 So, that relates to the Aroclors at
13 Swann Chemical Company.

14 Q. Okay. Can you tell the date of that
15 document from looking -- I think inside on the first
16 page, inside, there may be some information on
17 that.

18 A. It says 1932.

19 Q. Okay. Now, this would have been a
20 document, then, produced by Swann prior to its
21 purchase by Monsanto?

22 A. This is correct.

23 Q. And nobody at Monsanto would have actually
24 had direct involvement in preparing that particular
25 document?

1 A. No.

2 Q. Except to the extent those people became
3 Monsanto employees after they were acquired by
4 Monsanto?

5 A. Right.

6 Q. Okay.

7 MR. CRAWFORD: Okay. If you know,
8 Mr. Benignus, about the employees. He's asking you
9 specifically about that.

10 THE WITNESS: I said it's correct.

11 MR. CRAWFORD: Okay.

12 Q. (By Mr. Lacey) Now, with regard to the
13 information that's contained in that document, do
14 you know anything about the source of the
15 information for what's in there?

16 A. Other than the sources from the Swann
17 Chemical Company.

18 Q. Nothing beyond that?

19 A. Nothing beyond that that I know of.

20 Q. Okay. Let me have that document back, and
21 we'll put that in a stack over here that we've
22 looked at.

23 Let me next show you the Document 1508
24 through 1518 and ask if you can identify that
25 document.

1 A. Essentially the same thing.

2 Q. Okay. Can you tell when that one was
3 written?

4 A. 1934.

5 Q. So, that would be an updated version --

6 A. Right.

7 Q. -- of the one we just looked at?

8 Also written by Swann?

9 A. Correct.

10 Q. Prior to its acquisition by Monsanto?

11 A. Right.

12 Q. And you don't know anything about the
13 source of the information contained in this
14 document?

15 A. No.

16 Q. Do you know whether or not these pieces of
17 literature were provided to anyone outside Swann?

18 A. I would certainly think so.

19 Q. Okay. Now, in 1935 Swann was acquired by
20 Monsanto, correct?

21 A. Correct.

22 Q. Okay. Now, let me just leave this
23 document, the one that's the 1934 document, there
24 for your review; and let me show you now a document
25 1559 through 1580. And it's got a number on it,

1 Application Data Bulletin No. P-115.

2 The first thing I want to try to do is
3 identify where that document came from. Do you know
4 where that document would have -- who would have
5 originated that document?

6 A. Monsanto Chemical Company.

7 Q. And was that document the Monsanto version
8 of the previous Swann documents in terms of the
9 information it contained?

10 A. That's essentially correct, yes.

11 Q. Now, do you know when that document was
12 prepared?

13 A. Well, I see a date here, 1945.

14 Q. Okay. That's a date stamp on it?

15 A. It's a date stamp.

16 Q. Okay. That is not a copyright date like is
17 in the Swann documents?

18 A. No. It is different. The Swann documents
19 had a copyright date. Someone stamped this, dated
20 it June, 1945.

21 Q. And what we can tell from that date stamp
22 is that that, at least, was in existence by June of
23 1945 because a June, '45, date stamp is on it?

24 A. I would assume so.

25 Q. Unless somebody went back with a date stamp

1 to specifically back date it, that would be true,
2 wouldn't it?

3 A. I would think so.

4 Q. Now, do you have any idea of when that
5 document was actually prepared, how much in advance
6 of June, 1945?

7 A. No, I don't.

8 Q. Okay. What group or department within
9 Monsanto would be responsible for producing
10 documents like that?

11 A. This "P" indicates the phosphate division,
12 which is the inorganic division.

13 Q. That was the division you worked for with
14 regard to --

15 A. Later on.

16 Q. -- PCB's in the 1947 --

17 A. Yeah.

18 Q. -- and following period?

19 A. Yeah.

20 Q. So, if we see the letter "P" on a document,
21 we know it came from the phosphate division,
22 correct?

23 A. Well, this one, since it's the only letter,
24 this is correct.

25 Q. Okay. And within that group -- is there a

1 particular group or particular specialty that's
2 assigned the responsibility of actually preparing
3 documents of this type?

4 A. Well, this -- this seems to be coming out
5 before my time, but it would be applicable; so, I'll
6 answer it on that basis.

7 Documents of this type are prepared by
8 people who have assembled this technical information
9 and have put it together in rough form. Then the
10 procedure is usually to -- not in all cases -- but,
11 I would think, writers of literature. And these
12 people would be in the advertising department, not
13 necessarily meaning writing ads, et cetera, but
14 we'll have them in this department. They are
15 writers. They put this into a final finished form,
16 and that gives rise to this, for example.

17 Q. So, you have people who are skilled in --
18 in writing things that make sense and are
19 understandable, who actually put it in final form?

20 A. This is correct.

21 Q. What was the purpose of preparing
22 literature of that sort?

23 A. The purpose of preparing literature of this
24 sort was to distribute it to customers of the
25 company who were buying the Aroclors, the subject of

1 this, to disseminate and distribute information to
2 these people. That was the purpose.

3 Q. Okay. So, it was designed to provide to
4 customers?

5 A. Essentially, yes.

6 Q. Okay. What's the relationship between
7 Monsanto Chemical Company and Monsanto Company? I
8 notice that says "Monsanto Chemical Company" on it.

9 A. Oh, in later years the "Chemical" was
10 eliminated. That is all.

11 Q. Okay. Now, let me show you another
12 document, 33 through 53. And, in particular, I'm
13 again interested in trying to determine whether or
14 not this is the same document as the one that you
15 have just looked at or whether it's a different
16 document.

17 A. Well, without going through each page, it
18 certainly appears to be the same.

19 Q. Okay. Was there some sequence that
20 Monsanto used in order to identify revised versions
21 of documents so, for example, when you were going to
22 give one to a customer you could make sure you gave
23 them the most current one?

24 A. I don't know of a formal procedures. These
25 were reissued when they ran out.

1 Q. Okay.

2 A. That's essentially the modus operandi.

3 Q. And the only way you could get a new one is
4 if somebody did a new one and, hopefully, they would
5 throw the old ones away and have the new ones ready
6 to hand out when there was a new one, then?

7 A. Yes.

8 Q. But if --

9 A. Now -- now, I am not certain. There are
10 some numbers often in these things. I don't see
11 them now, but if I saw such a set of numbers --
12 sometimes there is an indication as to the number of
13 printings that were made and perhaps something about
14 the date, but I'm not sure of that. Those numbers
15 often are confusing to me.

16 Q. Okay. Well, let me see -- let me look at
17 this one just a second and see if I can find the
18 sort of thing you're talking about.

19 Where do those numbers appear?

20 Usually at the end of the document?

21 A. I would think so. That's where I looked.
22 I didn't find any.

23 Q. Okay. Well, I don't find one on this one
24 either. Let me just give you another document.
25 We'll just go to another one here.

1 Let me hand you Document 1537 through
2 1558, also labeled "Application Data Bulletin
3 P-115," and ask you to take a look at that. And, in
4 particular, I think on the next to last page of that
5 document, down at the lower left-hand corner, there
6 are some numbers down there.

7 A. Yes, this is the kind of thing I was
8 looking for.

9 Q. What sort of things do those numbers stand
10 for within Monsanto Company?

11 A. I do not know.

12 Q. Okay.

13 A. I do not know.

14 Q. Can you tell from that document that I've
15 just handed you whether it's older or newer than the
16 two previous versions of Bulletin P-115 that you've
17 looked at?

18 A. Offhand, no. They look very similar to me.

19 Q. Well, is there any way you could review
20 them and tell me which one is older and which one is
21 newer?

22 A. (No response)

23 Q. If there is any difference.

24 A. I don't see any difference.

25 Q. Okay.

1 A. I see no difference

2 Q. Okay. Let me hand you another "Application
3 Data Bulletin P-115," numbered 1581 through 1605 --
4 and, again, on the last page there, down at the
5 lower left-hand side, there's another series of
6 letters and numbers -- and ask you if you can, from
7 that, identify anything about it.

8 A. Here, I would say the numbers 8-47-71 may
9 mean August, '47, 1971.

10 Q. Well, that doesn't make sense, though, does
11 it, because there aren't 47 days in August?

12 A. Oh, excuse me. No, I said 1947.

13 Q. Oh, 1947?

14 A. Oh, no. Wait a minute. Wait a minute.
15 I -- strike that.

16 August, 1947. What does the "71"
17 mean? I don't know.

18 Q. I don't know. But if you were going to try
19 to date that, you would assume it's August, 1947?

20 A. Until I got mixed up with the number 71,
21 that I don't know what it means.

22 Q. Okay. Do you have any idea, looking at
23 that code, when that document was produced?

24 A. I'm not sure from this -- this code that --
25 I'm confused with the code, actually.

1 Q. Who at Monsanto would know about these code
2 numbers and how to identify when these various
3 documents were printed, if anybody?

4 A. My best guess on this is someone in this
5 department I referred to earlier, call it
6 "advertising department" or "literature department."

7 Q. You think they might have a key to these
8 codes?

9 A. If there is one.

10 Q. Okay.

11 A. If there is one.

12 Q. Now, let me show you some more copies of
13 this same bulletin. The next number is 1606 through
14 1634; and on this one, I'd ask you, again, to look
15 at the next to last page and let me know whether or
16 not you have any idea of what those letters and
17 numbers stand for.

18 A. Yeah, I see this.

19 Q. Okay. What do those letters and numbers
20 stand for?

21 A. "P. G. B." are my initials.

22 Q. All right.

23 A. "10," I would assume is October.

24 Q. Okay.

25 A. The year 1948. And, again, this number 71

1 up here is --

2 Q. Okay. Now, why would your initials appear
3 on that document?

4 A. On this document?

5 Q. Yes.

6 A. It was a reissue of the prior documents in
7 1948, and I was in that area at that time.

8 Q. Would that mean that you had reviewed that
9 document prior to its issuance to ensure that it was
10 accurate and so on and so forth?

11 A. I would say so.

12 Q. That "71" is the same number that appeared
13 on the prior document that we --

14 A. Yes.

15 Q. -- couldn't figure out, isn't it?

16 A. Yeah.

17 Q. Now, if that number right there means that
18 you issued that in -- what did you say? October of
19 1940 --

20 A. '48.

21 Q. If we use the same identification, when
22 would that previous document have been issued?

23 A. 1947.

24 Q. Okay. And whose initials are there -- or
25 what letters are there in front of that?

1 A. "P. L."

2 Q. Who would "P. L." be?

3 A. I'd say that would be Paul Logue.

4 Q. Paul Lowe?

5 A. Logue, L O G U E.

6 Q. Did Mr. Logue precede you in the job that
7 you held when these things were issued under your
8 initials?

9 A. Paul Logue and I were in what they called
10 the development department. Yes, we were together.

11 Q. Okay. And, so, it would make sense that
12 the documents labeled "P. L." were reviewed by
13 Mr. Logue before they went out --

14 A. Right.

15 Q. -- as a part of his job responsibilities
16 with Monsanto; is that correct?

17 A. I would say this is correct.

18 Q. And, so, let -- let's go back now and let
19 me take a look at -- can you hand me those documents
20 just a second, and let me look here?

21 We've got -- let's see. Let me look
22 at the one just prior to that, see if that has a set
23 of initials on it or not.

24 Okay. We don't have -- the first one
25 we've got a set of initials on, as far as I can

1 tell, is this Document 1581 through 1605, which it
2 would appear was issued under Mr. Logue's direction
3 in August of 1947; is that correct, from the code on
4 it?

5 A. I think so.

6 Q. Okay. Then the next one we've got with the
7 letters and numbers is this Document 1606 through
8 1634 that apparently was issued after your review in
9 October of 1948; is that correct?

10 A. It has my initial. That doesn't mean that
11 others didn't review this.

12 Q. Okay. But you --

13 A. But these are my initials, and the other
14 ones are Paul Logue. I can see this.

15 Q. And -- and you would have had at least a
16 review responsibility for that document, wouldn't
17 you?

18 A. Yes.

19 Q. Okay. And that was issued apparently in
20 October of 1948?

21 A. I would say so --

22 Q. Okay.

23 A. -- according to these numbers.

24 Q. Let me show you another version of P-115,
25 document 1635 through 1663 and on the next to last

1 page it has your initials and the code indicating
2 that one was issued in April of 1949, does it not?

3 A. Yes.

4 Q. Okay. Let me show you another version of
5 Application Data Bulletin P-115, Document 1664
6 through 1692. Again, on the next to last page we
7 have your initials and the code indicating that was
8 issued in June of 1950, correct?

9 A. Yes.

10 Q. Okay. Let me show you another version of
11 the Application Data Bulletin P-115, No. 1693
12 through 1721. And on the next to last page we have
13 your initials and a code indicating that document
14 was issued in January of 1952, correct?

15 A. Yes.

16 Q. Okay. Let me show you another copy of an
17 Application Data Bulletin No. P-115, Document 55
18 through 83, and direct your attention to the next to
19 last page, which has your initials and a code
20 indicating this document was issued in November of
21 1952, correct?

22 A. Yes.

23 Q. Let me show you another version of the
24 Application Data Bulletin P-115, No. 1722 through
25 1752, and direct your attention to the fourth page

1 from the end where there's a code giving your
2 initials and indicating this was issued in March of
3 1953, correct?

4 A. Yes.

5 Q. Okay. Now, in the case of each one of
6 these documents where your initials appear in the
7 date code, you would have -- either by yourself or
8 with others -- have reviewed these documents before
9 they were sent to the printers for printing and then
10 distribution?

11 A. Yes.

12 Q. Were these printed in-house at Monsanto by
13 Monsanto's own printing presses, or did they send
14 these --

15 A. No. They were sent out.

16 Q. Okay. Do you know how many were presented
17 at one printing?

18 THE VIDEOGRAPHER: Excuse me. I have
19 to go off the record for a minute.

20 (Discussion off the Record)

21 THE VIDEOGRAPHER: We are now back on
22 the record. The time is 9:58 a.m.

23 Q. (By Mr. Lacey) Do you know how many of
24 these -- any version of these bulletins would be
25 printed at one printing by Monsanto?

1 A. They were, as we said, printed outside.
2 But the question is how many copies.
3 Q. Correct. Do you know?
4 A. I'm -- this is one reason I'm looking at
5 the numbers. Some of these -- one sees this number
6 71 --
7 Q. That appears in each one of these
8 documents.
9 A. That seems to be in each one.
10 Now, here's a "2M."
11 Q. Do you know what that stands for?
12 A. I'm not -- excuse me -- I'm not sure what
13 it stands for, but it may have to do with the
14 number --
15 Q. Quantity?
16 A. The quantity. I wouldn't know what else.
17 Q. It definitely appears that the 71 that's in
18 each one of these codes is consistent because we
19 have the same Application Data Bulletin, doesn't it?
20 A. Yes, I would think so.
21 Q. All right. And it appears that "71"
22 references Application Data Bulletin P-115, correct?
23 A. That's -- that's reasonable to assume. I
24 would assume that.
25 Q. Now, let me -- we'll come back and talk

1 about these bulletins later --

2 A. All right.

3 Q. -- but let me try to identify some
4 additional documents here in terms of what they
5 are. And let me start by handing you a document
6 called "Application Data Bulletin No. OP-115," 1794
7 through 1824, and ask you to take a look at that.

8 A. (Witness complies)

9 Q. Did you review that document last night, or
10 one like it?

11 A. Oh, I saw it last night, yes. They have
12 this.

13 Q. What does the "OP-115" mean as opposed to
14 the "P-115"?

15 A. This is what I am trying to think, what
16 does that mean. The "P", we decided, was the
17 phosphate division.

18 Q. That's what you told me, yes.

19 A. Right. The "O," this, I do not know, other
20 than, by this point in time, the materials were in
21 the area of the organic chemicals division.

22 Q. Okay. There's a code number there on that
23 document, is there not?

24 A. This is what I looked for.

25 Q. Is there a code number there?

1 A. Yes.

2 Q. The code number concludes with that same
3 reference to "71," does it not?

4 A. Right. This is right.

5 Q. Now, is that document basically filled with
6 the same information that the previous Application
7 Data Bulletins P-115 were filled with?

8 A. (No response)

9 Q. And if you need to, you can take a moment
10 to compare that document with one of the P-115
11 documents.

12 A. Well, without going through it page by
13 page, it's essentially the same, I would say.

14 Q. Okay.

15 MR. CRAWFORD: Mr. Benignus, you may
16 want to look and be sure if it is the same or not
17 the same. I don't know if they are or not, but

18 THE WITNESS: Well, I can't tell from
19 paging through here.

20 MR. CRAWFORD: Well --

21 THE WITNESS: It looks the same.

22 A. Doesn't it look the same?

23 Q. (By Mr. Lacey) I think it is, but I want
24 to ask you to tell me --

25 A. As far as I can tell, it is.

1 Q. Okay.

2 MR. CRAWFORD: You might want to look
3 at the -- maybe the index on the two to see if
4 there's any difference.

5 Q. (By Mr. Lacey) Feel free to do that. I
6 just want to establish for us whether or not we've
7 essentially got another version of the same document
8 that appears to have a different cover on it --

9 A. Well --

10 Q. -- and looks like they changed the cover
11 and they changed it from being P-115 to OP-115.

12 A. That's how far I am on this.

13 Q. Okay. Well, take a look to -- at -- at the
14 document and page through a couple of them to see if
15 they're essentially the same information.

16 A. I'm looking at the index and seeing no
17 difference. In fact, they are the same, the index.

18 Q. Okay. Do you want to flip through the rest
19 of the document --

20 A. It has a different front page.

21 Q. Okay. And we know it's got an "OP" instead
22 of a "P" on it?

23 A. Right, which I assume is the
24 organic-phosphate division.

25 Q. Okay. And that -- you told me what

1 happened was the phosphate division moved from
2 inorganic to organic?

3 A. The Aroclors did, yes.

4 Q. In about 1952?

5 A. Approximately. It could have been a bit
6 earlier. But this is a approximate point in time,
7 yes.

8 Q. Are you satisfied that this last document
9 I've handed you is just an updated version of the
10 previous documents?

11 A. That's the way it looks to me.

12 Q. Okay. Now --

13 A. With the "OP" and a different front page.

14 Q. Right. Now, the last document that we
15 had -- you might hand me that last 115 document
16 that's immediately below that one, too.

17 A. This one?

18 Q. Yes.

19 A. (Witness complies)

20 Q. The last P-115 document we had, from the
21 code on it -- and we're talking about Document 1722
22 through 1752 -- was printed in March of 1953,
23 correct?

24 A. Yes.

25 Q. Okay. And that went out with the P-115

1 cover and your initials, correct?

2 A. Yes.

3 Q. Now, when we come to the first of the OP
4 documents -- and maybe you can hand that OP document
5 back to me.

6 A. (Witness complies) That's OP.

7 Q. Let me see if I can get our OP documents
8 arranged and look at the pages that are -- that
9 contain the codes and figure out when they were
10 issued.

11 Did you have an employee number at
12 Monsanto? I mean, did they have employee numbers,
13 badge number, or anything like that?

14 A. Not that I know of.

15 Q. Okay. Well, I noted that in these OP
16 documents, the initials had disappeared in the codes
17 that we see down at the bottom of the documents at
18 the end, and in place of that there are numbers.
19 And I just wondered if -- if maybe those numbers
20 represented the individual who was responsible for
21 review of the document.

22 A. I don't have one with the number.

23 Q. Okay. Well, let me show you these. I'm
24 trying to get these aligned in order here. And let
25 me do that. I think I have them in what I believe

1 to be their proper sequence.

2 Let me show you, first, Application
3 Data Bulletin OP-115, Document 1753 through 1782.
4 And on the third page from the end, we find the code
5 at the bottom is 2-195-03-54-02M-71. And in each of
6 the OP documents that I'm going to show you, the
7 number 2-195 is the beginning number. And I'm just
8 wondering if that 2-195 represented a reference to a
9 particular individual who reviewed the document?

10 A. I can't answer that. I don't know.

11 Q. Fine. Would you, after you moved or after,
12 actually, the PCB division moved to the organic
13 group, have continued with responsibility for
14 reviewing documents like this before they went out?

15 A. I would be in the area and could be given
16 this to look at.

17 Q. We know from your initials on the preceding
18 documents --

19 A. That I did, yes.

20 Q. -- that you did for some period of time?

21 A. Yes, right.

22 Q. Now, looking at the code on that document,
23 it has the same "71" that's referenced all the
24 previous bulletins, does it not?

25 A. Yes.

1 Q. And if we look at the code, we see a
2 reference there in the numbering system. Maybe you
3 can open up the last previous 115 to the code --
4 A. This?
5 Q. -- and we can compare that code number.
6 A. That doesn't have any code number.
7 Q. I believe it does, right there?
8 A. No.
9 Q. I meant the code -- I didn't mean exactly
10 the same code, but it has a -- it has a code number
11 on it, does it not?
12 A. (No response)
13 Q. Yep. It has your initials and then a code
14 number, correct?
15 A. Which I thought was the date.
16 Q. Yes, which -- which you've indicated you
17 think means this was published in March of 1953?
18 A. That's how I interpret this.
19 Q. Okay. Now, as we compare the code number
20 that appears on the same page of the document, that
21 code in the last Application Data Bulletin P-115,
22 Document 1722 through 1742, appears on Page 27 of
23 the internal number of that document, does it not?
24 A. Yes.
25 Q. When we come to Page 27 of the Application

1 Data Bulletin OP-115, Document 1753 through 1782,
2 and we look at Page 27 of the internal numbering of
3 that document --

4 A. Okay.

5 Q. -- we find another set of codes --

6 A. Codes.

7 Q. -- down at the bottom left?

8 A. Right.

9 Q. We have at the end "71," which appears to
10 reference this particular series of books, does it
11 not?

12 A. Right. We have this same 2M reference that
13 we've previously noted that may relate to the number
14 of documents published, correct?

15 A. Yes.

16 Q. At the beginning, instead of initials, like
17 we previously had, which were your initials --

18 A. Yes.

19 Q. -- P. G. B., we have a 2-195. And you're
20 not sure whether that references a person --

21 A. I -- I don't know what that is, no.

22 Q. And then we have "3-54," which would
23 apparently indicate this was published in March of
24 1954, would it not?

25 A. I would assume so.

1 Q. Okay. And if we come to the next document,
2 Application Data Bulletin OP-115, Document 1794
3 through 1824, we have the same code numbers except
4 numbers indicating this was published in February of
5 '55, correct?

6 A. It looks that way, right.

7 Q. As we come to the next Application Data
8 Bulletin OP-115, Document 1825 through 1856, we
9 have, again, that same series of numbers except a
10 number indicating this was apparently published in
11 December, 1955, correct?

12 A. Yes.

13 Q. And as we come to the next Application Data
14 Bulletin OP-115, Document 1857 through 1888, we have
15 a set of code numbers which would appear to indicate
16 that this document was published in November of
17 1956, correct?

18 A. Let me see that.

19 MS. OLSEN: What were the document
20 numbers two documents back, the one before 1825?

21 MR. LITTLE: 1794 to 1824.

22 MS. OLSEN: Okay. Thank you.

23 A. Yes, this looks -- now, they don't have the
24 2M in here, do they?

25 Q. (By Mr. Lacey) Right, which would maybe

1 indicate a different quantity.

2 A. It may indicate a different quantity. Here
3 the numbers seem to be run together. Here they are
4 separated. But it -- it appears to relate.

5 Q. To November, 1956?

6 A. I would assume so.

7 Q. Then we come to the next Application Data
8 Bulletin OP-115, No. 1889 through 1918; and the code
9 numbers here appear to indicate that the document
10 was published in November of 1957, correct?

11 A. Yes.

12 Q. Okay. And, again, you may or may not have
13 reviewed these documents that don't bear your
14 initials but bear the code 2-195; you're just not
15 sure?

16 A. I don't know what 2-195 is.

17 Q. Okay. Would somebody in the group that you
18 worked with have been responsible for reviewing
19 these documents before they were published?

20 A. Those were my initials on -- that indicates
21 that I was involved.

22 Q. And --

23 A. 2-195, I would assume, is someone else.

24 Q. Okay. And why do you assume 2-195
25 indicates someone other than you?

1 A. I don't know who 2-195 is.

2 Q. Okay. Is there some reason you think it's
3 definitely not you and it's somebody else, or you
4 just don't know who it is?

5 A. I don't know.

6 Q. Okay. Do you recall ever transferring the
7 responsibility for reviewing these documents to
8 someone else?

9 A. I -- officially -- you say, "transfer."
10 Did I? No.

11 Q. Do you recall --

12 A. They were reissued by whoever was there.

13 Q. Yes. What I'm -- what I'm asking -- and
14 maybe I should ask it a different way. What I want
15 to know is whether or not you recall some point in
16 time where it was no longer your job responsibility
17 to review these documents before they were reissued?

18 A. Now, that runs up to what years?

19 Q. Until you retired.

20 A. Until I retired?

21 Q. Yes. Do you recall any point in time where
22 you no longer had the responsibility for reviewing
23 these documents that were in the 115 series, whether
24 it's P-115 or OP-115, after you started reviewing
25 them in 1948?

1 A. '48. Yes, this is correct. There were
2 periods when I was not any longer associated with
3 the nonelectrical areas.

4 Q. Okay. And when did -- when would it be
5 that you no longer would have had any responsibility
6 for documents like these that are labeled "P-115"
7 and "OP-115"?

8 A. I don't know this -- this -- this point in
9 time, I really don't.

10 Q. Okay. That's fine.

11 A. In other words, complete dissociation from
12 it; is this what you're asking?

13 Q. That's what I'm trying to find out about.

14 A. I really don't know.

15 Q. Okay. Let me direct your attention back to
16 Document 1606 through 1634. And this is the
17 document that had your initials and the code
18 indicating it was printed in October of 1948.

19 A. Okay.

20 Q. I want to direct your attention to Page
21 1625 of the numbering system for that document, or
22 Page 19 of the document, where it talks about
23 dermatology and toxicology. Do you see that topic
24 being discussed there?

25 A. Yes.

1 Q. Where would you have gotten the information
2 to review and verify the accuracy of the information
3 in that document on dermatology and toxicology?

4 A. From the medical department.

5 Q. This is the Monsanto medical department?

6 A. Correct, yes.

7 Q. And who in the medical department was
8 responsible for giving you that information?

9 A. Dr. Kelly.

10 Q. Dr. Emmet Kelly?

11 A. Yes.

12 Q. Would you have spoken personally with
13 Dr. Emmet Kelly to verify the accuracy of that
14 information?

15 A. It would be directed to his attention,
16 reviewed by him, and approved by him. That was his
17 responsibility on the dermatology and toxicology.
18 That is the responsibility of the medical director.
19 This is 14th copy.

20 Q. Would you send him a draft of the language
21 that you proposed to include and ask that he review
22 it and verify its accuracy?

23 A. I may not have done this, as I indicated.
24 This was sent to writers who put this thing
25 together.

1 What I am saying is: This would then
2 have to, according to the procedure, be forwarded to
3 the medical department for approval of whatever is
4 written on the dermatology or toxicology.

5 Q. Well, what I'm trying to find out, you had
6 some responsibility for actually reviewing that
7 particular version of the Application Data Bulletin
8 P-115 before it was printed and then distributed to
9 customers, correct?

10 A. If my initials are on here, I would say,
11 yes. I'm not dissociated from it.

12 Q. Okay. And I guess I'm trying to find out
13 whether you personally assured yourself that all the
14 information in it was checked out by the appropriate
15 people before this thing went to press.

16 A. In the procedure and organization of
17 handling this, that calls for submitting these to
18 the medical director for his approval on what you're
19 talking about here.

20 Q. I understand.

21 A. Okay.

22 Q. And my -- my question is slightly
23 different.

24 Would you, since you had
25 responsibility for that document -- it's got your

1 initials on it -- would you personally ensure that
2 the medical director had, in fact, reviewed that
3 information and approved it before you let the
4 document go to press?

5 A. It was not myself that let the document go
6 to press. It would have gone through the people who
7 handled the printing of this. And what was to be
8 printed, was response -- their responsibility to
9 pass to the medical director.

10 Q. Well, I'm trying to find --

11 A. That's how I interpret this, yes.

12 Q. I'm trying to find out who it was who
13 finally said, "This document can go to press. It's
14 all been verified. It's all accurate. Everything
15 is fine."

16 A. On the medical thing, it would be Dr.
17 Kelly.

18 Q. Well, was each piece of the document, then,
19 pieced out to somebody and nobody had a
20 checklist to make sure at the end that Mr. Kelly --
21 or Dr. Kelly had reviewed his part and whoever it
22 may be was responsible for each part had reviewed it
23 so they could say, "Well, yes, everybody has
24 reviewed it. We got all the okays back"?

25 A. I think you'd have to ask -- address this

1 to who the product manager was.

2 Q. The product manager?

3 A. I would think.

4 Q. But it wasn't not you?

5 A. I was not the product manager of the group.

6 Q. Yeah. My -- let me rephrase my question.

7 It wasn't you who had the
8 responsibility of ensuring that everybody who was
9 supposed to review each section of this document
10 had, in fact, done so and given their approval
11 before it was sent out?

12 A. No.

13 Q. Okay. Did you, during your work in and
14 with PCB's in the organic division and in the
15 inorganic division, ever provide copies of these
16 documents to anybody?

17 A. They were mailed out to the customers.

18 Q. Unsolicited? They were just mailed?

19 A. I wouldn't say "unsolicited." I don't know
20 how to interpret it. They were available for
21 purchasers, users of PCB.

22 Q. Okay. They could get a copy?

23 A. They could get a copy. This usually
24 transpired, I would say, through the sales
25 department.

1 Q. Let me show you the next document that you
2 reviewed, Document 1635 through 1663, which
3 according to the code with your initials, was
4 published in April of 1949 and, again, with regard
5 to the section on dermatology and toxicology, which
6 appears at Document No. 1654, internal Page No. 19,
7 ask if, again, the review of that language to ensure
8 its accuracy was the responsibility of the medical
9 department and Dr. Emmet Kelly.

10 A. That is the place where it originated; and
11 it is the responsibility of the medical department,
12 yes.

13 Q. Okay. Would the same thing be true for
14 Document 1664 through 1692, where the dermatology
15 and toxicology information appears on internal Page
16 19, Document No. 1683?

17 A. Is this a different one?

18 Q. Yes, it's a different one.

19 Would that also have been the
20 responsibility --

21 A. This also would be, yes.

22 Q. -- of Dr. Emmet Kelly and the medical
23 department?

24 A. Right.

25 Q. Okay. Would the same thing be true for the

1 "Dermatology and Toxicology" section in Document
2 1693 through 1721, which appears at internal Page
3 19, Document No. 1712?

4 A. This is "Dermatology and Toxicology." The
5 answer is "yes."

6 Q. So, again, Dr. Emmet Kelly and his
7 department would be responsible for the review and
8 accuracy of that information?

9 A. That's where the information came from.

10 Q. And he would be responsible for reviewing
11 it and making sure it was accurate before it was
12 published, correct?

13 A. I have to assume this.

14 Q. If he didn't, he should have?

15 A. I'm not a doctor.

16 Q. Well, I understand. If he didn't --

17 A. I'm not a dermatologist nor an MD.

18 Q. Certainly. If he didn't review that
19 information before it went out, he should have?

20 A. I would have to say "yes."

21 Q. It's important that information like that
22 be accurate, isn't it?

23 A. Yes.

24 Q. Let me go to Document 55 through 83 and,
25 again, ask you about the "Dermatology and

1 "Toxicology" section, which appears on internal Page
2 19 of the document and 74 of the document numbering
3 series and ask again: Is that "Dermatology and
4 Toxicology" section the responsibility for review
5 and correctness of Dr. Emmet Kelly in the medical
6 department?

7 A. Yes.

8 Q. Okay. Let me ask you specifically about
9 Document 1889 through 1918 with regard to the
10 "Dermatology and Toxicology" section that appears on
11 Page 19 of the internal numbering of the document
12 and page -- Document Page No. 1908, whether that
13 "Dermatology and Toxicology" section was the
14 responsibility of the medical department and
15 Dr. Emmet Kelly as far as review and accuracy went?

16 MR. CRAWFORD: David, are these all in
17 the time period we're talking about, which would be
18 '48 to -- the Fifties?

19 MR. LACEY: Yeah. It would go
20 through -- it appears from the codes, 1957, I
21 believe --

22 MR. CRAWFORD: Okay.

23 MR. LACEY: -- was the last one.

24 MR. CRAWFORD: Okay. So, the time
25 frame is '48 to '57, roughly. Okay.

1 Q. (By Mr. Lacey) Would that have -- would
2 that "Dermatology and Toxicology" section have been
3 the responsibility of Dr. Emmet Kelly as far as
4 review and accuracy of it went?

5 A. As medical director, he's responsible for
6 dermatology and toxicology.

7 Q. And specifically for reviewing and ensuring
8 the accuracy of that particular discussion of
9 dermatology and toxicology, correct?

10 A. I would say so.

11 Q. Okay. Would the same thing be true for the
12 other versions of booklets P-115 and OP-115 that we
13 have previously discussed today, in each one of
14 those?

15 A. Yes.

16 Q. In each one of those, Dr. Emmet Kelly and
17 the medical department would have been responsible
18 for reviewing and determining the accuracy of the
19 section on dermatology and toxicology?

20 A. Yes.

21 Q. Okay. And you, to the extent you were
22 responsible for certain of these books, from the
23 codes shown on them, would not have taken upon
24 yourself to let them be published without having
25 been reviewed by Dr. Emmet Kelly, correct?

1 A. To my knowledge of their being reissued,
2 this is true. I was not necessarily informed of a
3 reprinting every time. My responsibility when I was
4 associated with the PCB's in the nonelectrical area
5 was in preparing this information that is in the
6 bulletin. And --

7 Q. Okay. Which information did you prepare
8 specifically and review for accuracy?

9 A. All right. Let's say I "dealt with." I
10 myself did not necessarily originate or develop the
11 information. I would have acquired information that
12 is contained in here; and I pass it along as a
13 matter of knowledge and information, not that I
14 myself developed this.

15 Q. I understand.

16 A. All right. "General Physical Properties,"
17 here, yes, I would review this and see to it that it
18 is as it should be.

19 Q. Okay.

20 A. All right.

21 Q. What about the discussion on adhesiveness;
22 would you have had anything to do with the
23 discussion on adhesiveness?

24 A. Yes, I would have reviewed this. And
25 Aroclor were used.

1 Q. What about the discussion on specific
2 volume; would you have reviewed that?

3 A. Yes, I would have reviewed that. This is
4 numerical, technical data.

5 Q. What about the discussion on average
6 coefficients of expansion?

7 A. Right.

8 Q. "Corrosion," would you have reviewed that?

9 A. I would have reviewed that and the
10 densities.

11 Q. "Electrical Properties," would you have
12 reviewed that?

13 A. Yes, I would have reviewed that.

14 Q. "Nondrying Properties," would you have
15 reviewed that?

16 A. Yes.

17 Q. "Nonflammability"?

18 A. Yes.

19 Q. "Solubility"?

20 A. Yes.

21 Q. "Specific Heat and Thermal Conductivity"?

22 A. Yes.

23 Q. "Stability"?

24 A. Yes.

25 Q. "Thermoplasticity"?

1 A. Yes.

2 Q. "Vaporization Loss"?

3 A. Yes.

4 Q. "Vapor Pressure"?

5 A. I lost a page, but the answer is "yes."

6 Q. Okay. Now, when we come --

7 A. Oh, yes, "Vapor Pressure."

8 Q. When we come to the section of the bulletin

9 that deals with applications -- have you come to

10 that section, yet?

11 A. Oh, here it is, yes.

12 Q. Now, would you have reviewed the various

13 things that stated applications?

14 A. Yes.

15 Q. So, you would have at least reviewed the

16 language about adhesives?

17 A. Yes.

18 Q. "Electrical Equipment"?

19 A. Yes.

20 Q. "Expansion Medium"?

21 A. Yes.

22 Q. "Hydraulic Medium"?

23 A. Yes.

24 Q. "Lubrication"?

25 I didn't read all the subheadings

1 under "Hydraulic Medium," but --

2 A. Well, yes.

3 Q. "Lubrication"?

4 A. (No response)

5 Q. Is that --

6 A. Yes.

7 Q. "Gasket and Packing" -- "Gaskets and
8 Packing Materials"?

9 A. Yes.

10 Q. But when we get down to "Dermatology and
11 Toxicology," you would not have reviewed that; is
12 that correct?

13 A. When it gets down to "Dermatology and
14 Toxicology," it is not my creation --

15 Q. I understand.

16 A. -- to begin with.

17 Q. I understand. What I'm --

18 A. This would be subject to reviewal and
19 approval by the medical department --

20 Q. Okay. The point I'm trying --

21 A. -- not myself.

22 Q. Right. The point I'm trying to get to is:
23 Everything up to that page of this document would
24 have been subject to your review?

25 A. Yes.

1 Q. That one section would not have been
2 **subject** to your review and approval, correct?

3 A. Officially this is correct.

4 Q. Well, what about unofficially?

5 A. Correct.

6 Q. It wasn't your responsibility, either?

7 A. It wasn't. I say it is the responsibility
8 of the medical department.

9 Q. Okay. Now, let's go on, after we get past
10 "Dermatology and Toxicology" --

11 A. Yes.

12 Q. -- there are, then, portions of the
13 bulletin that deal with suggested uses for Aroclors?

14 A. Yes.

15 Q. Would you have reviewed these various
16 suggested uses?

17 A. Yes, I would.

18 Q. Okay. And there's a whole list of uses
19 that are suggested?

20 A. Yes.

21 Q. And then there is a listing of other
22 literature at the very end of the bulletin that one
23 can get from Monsanto on specific uses.

24 You still need to get -- I think it's
25 yet a page further in maybe.

1 A. The next page.

2 Oh, this.

3 Q. There's a section of other literature that
4 one could order, I guess, correct?

5 A. Yes.

6 Q. And would you have reviewed that?

7 A. Yes.

8 Q. So, the only section of this entire booklet
9 that you would not very view would be "Dermatology
10 and Toxicology," correct?

11 A. I'm not responsible for this, yes --

12 Q. But you are --

13 A. -- that's correct.

14 Q. But you are responsible for everything
15 else?

16 A. Yes.

17 Q. Okay. And that would be true with regard
18 to each version --

19 A. This --

20 Q. -- of these documents?

21 A. This was my work. You say
22 "responsibility." This was my activity.

23 Q. Okay. That's fine. It's -- we're talking
24 about the same thing, aren't we?

25 A. Right.

1 Q. Okay. Now, let me see if we can switch to
2 another group of documents that deal with PCB's; and
3 they have a different series or at least a different
4 set of covers on them. I'm not sure that they're a
5 different series of documents, or the information
6 is.

7 But let me show you a Document 1919
8 through 1966 and ask if you've had a chance to look
9 at that document since yesterday afternoon?

10 A. I've seen this yesterday afternoon.

11 Q. Now, this document has much of the same
12 information on PCB's that the bulletins known as
13 "P-115" or "OP-115" had; is that correct?

14 A. This is correct, has much of the same
15 information.

16 Q. Do you know whether or not that document
17 was one that was generated earlier than the P and
18 OP-115 series or if this is a subsequent document
19 that replaced those earlier ones?

20 A. (No response)

21 Q. And I note for one example --

22 A. I'm looking at the information in here.
23 It's essentially derived from these earlier ones, I
24 would say. Now --

25 Q. Yeah. This appears to be a later --

1 A. It appears that way to me, yes.

2 Q. Okay. There's several things that would
3 seem to indicate that. If you look at -- toward the
4 end, where it gives the address for Monsanto, it has
5 a two digit zone in the mailing address.

6 Do you find that?

7 A. St. Louis 66?

8 Q. Yeah.

9 A. I see that now. Yes. Yes. This is out on
10 Lindbergh Boulevard, yes.

11 Q. The -- the development of these postal
12 zones is something that, used to have, a long time
13 ago --

14 A. Two numbers, and now they're five, is it,
15 or more.

16 Q. Yeah. But we're in the situation where we
17 at least have got two numbers in a zone at this
18 point.

19 Can you tell from reviewing that about
20 what date you think that document was created?

21 THE WITNESS: Did you write that
22 down?

23 MR. CRAWFORD: I don't -- I don't
24 think so.

25 THE WITNESS: I don't think we did.

1 MR. CRAWFORD: That's not one you had
2 a hand in writing, was it?

3 THE WITNESS: No.

4 MR. CRAWFORD: Okay. Well -- here,
5 I'll take a look at it.

6 If you don't know, just tell him you
7 don't know.

8 A. I don't know.

9 Q. (By Mr. Lacey) This is not a document that
10 you ever reviewed any portion of?

11 A. Not to my knowledge, no.

12 Q. Okay.

13 A. But it is the same information, by and
14 large, plus some other -- perhaps some additional
15 information.

16 Q. And all you can tell us is that it appears
17 to be subsequent to the P-115 --

18 A. Yes.

19 Q. -- OP-115 series?

20 A. This -- I would say "yes."

21 MR. CRAWFORD: David, on Page 33,
22 there's a footnote at the bottom referencing some of
23 the material that has a date of 1953. So, I guess
24 you could assume it must be after that; but I --
25 that's all I see.

1 Q. (By Mr. Lacey) And if it comes after the P
2 and OP series, then that would put it after about
3 1957 because that's the last OP series document we
4 found, correct?

5 MR. CRAWFORD: Well, if you know.

6 A. I would -- without being -- I'm not sure of
7 the date of this. I didn't put it out, but -- I
8 neither can confirm nor reject this.

9 Q. (By Mr. Lacey) Who would have been
10 responsible within Monsanto for putting out the
11 document that is numbered 1919 through 1966?

12 A. Let me see it again.

13 Q. Certainly.

14 A. The person responsible, I would say, is the
15 product manager.

16 Q. What --

17 A. That's the ultimate person responsible.

18 Q. Let me -- let me direct your attention to
19 the pages that have general physical properties of
20 the Aroclor compounds listed at the first of the
21 document.

22 A. This?

23 Q. Yes. Just -- no. As you flip in, there's
24 a chart about three or four pages in, similar to the
25 one you previously looked at.

1 Keep on going. You'll find the chart
2 of -- get through the table of contents there.

3 A. Oh, this.

4 Q. Yes. Now, we're talking -- that's the
5 chart that shows the general physical properties of
6 the some of the Aroclor compounds, correct?

7 A. As these earlier booklets do, right.

8 Q. Yeah, very similar to the earlier booklets?

9 A. It is.

10 Q. Yes.

11 A. Isn't that it?

12 Q. I think it is. And my question is this:
13 You indicated that you would have reviewed the
14 information on the charts in the earlier booklets to
15 confirm its accuracy, correct?

16 A. Yes.

17 Q. Now, who would have reviewed the
18 information on the chart here to ensure its
19 accuracy?

20 A. I do not know. I told you that the
21 responsibility organizationwise would be the product
22 manager. Now, there are people under him that would
23 have this assignment, I suppose; but he -- he's the
24 person ultimately responsible.

25 Q. What I'm trying to find out is whether you

1 know whether or not you, in fact, had the
2 responsibility or not for reviewing that chart for
3 that particular publication?

4 A. No.

5 Q. You know that you did not?

6 A. I did not, no.

7 Q. How do you --

8 A. I --

9 Q. Pardon me. How do you know you did not?

10 A. I didn't write this.

11 Q. And you know did you not review it?

12 A. No, I did not review this.

13 Q. Okay.

14 A. But, as you can see, much of the
15 information came from our earlier literature.

16 Q. Okay. Would the same thing be true for
17 Document 84 through 131; that is, that you didn't
18 write it but that much of the information contained
19 in it came from the earlier literature that you were
20 responsible for reviewing?

21 A. This looks like the same thing I just
22 looked at.

23 Q. It appears to be so to me.

24 A. I can't see a difference -- anything
25 different.

1 Q. Okay. And, so, the same thing would be
2 true: You did not personally review any of the
3 information in that document, but it does appear
4 that much of the information in there came from
5 earlier documents that you did review and verify?

6 A. Yes. Yes.

7 Q. Okay.

8 A. This is an -- an enlargement, a later
9 edition.

10 Q. Okay. Let me direct your attention to
11 another series of documents; and let me hand you
12 Document 2347 through 2377 and ask you to take a
13 look at that document, which is labeled "Monsanto
14 Askeral Inspection and Maintenance Guide."

15 Are you familiar with that document?

16 A. Yes. Yes.

17 Q. Did you have anything to do with that
18 document?

19 A. Yes.

20 Q. What did you have to do with that document?

21 A. I accumulated the information and the
22 data. I worked on the accumulation of this
23 information and data and making rough drafts of this
24 information that is contained here in this
25 literature.

1 Q. So, you were actually the person who
2 started putting together what became that booklet
3 that you have?

4 A. This is right, yes.

5 Q. Okay. About when did you actually start
6 the process of preparing that document that's called
7 an "Askeral Inspection and Maintenance Guide"?

8 A. It was sometime in the period of the early
9 to mid 1960's.

10 Q. Okay. Does that document have a code on it
11 at the back that will help you identify about when
12 it was published.

13 (Discussion off the Record)

14 THE VIDEOGRAPHER: We're about to go
15 off the record. The time is 10:43 a.m.

16 (Discussion off the Record)

17 THE VIDEOGRAPHER: We are now back on
18 the record. The time is 11:05 a.m.

19 Q. (By Mr. Lacey) Mr. Benignus, before we
20 took the break to let Mr. Crawford make some phone
21 calls and just take our morning break, you were
22 looking at that inspection and maintenance guide and
23 you were telling me that you prepared it sometime in
24 the 1960's?

25 A. Yes.

1 Q. All right. Was there any particular reason
2 why you prepared that document?

3 A. Yes.

4 Q. Why was that?

5 A. Well, it states its purpose in the
6 introduction. It says why it was prepared.

7 May I read it?

8 Q. Certainly.

9 A. "This manual describes the operating
10 characteristics of transformer Askeral liquid
11 insulation and how it differs from mineral oil."

12 Q. So --

13 A. "The information is based on facts gathered
14 by Monsanto over 30 years as producer of Askeral
15 plus knowledge gained from the experience of
16 transformer manufacturers and users. It is a manual
17 that deals with the difference of the
18 characteristics of liquid Askeral as versus mineral
19 oil."

20 Q. What was this to be used for? To whom
21 would this be provided, for example?

22 A. This would be provided to manufacturers of
23 Askeral transformers and also provided to users of
24 Askeral transformers.

25 Q. Now, in that introduction there was a

1 reference to Monsanto having produced Askeral for
2 over 30 years?

3 A. Yeah.

4 Q. Does that 30-year period run from when
5 Monsanto acquired the Swann Chemical Company or back
6 from 1930, '31, '32, when G.E. started using PCB's
7 for transformer dielectric fluids?

8 A. I'm not sure. It says, "Based on facts
9 gathered by Monsanto over 30 years." I -- I can't
10 define it any closer than that.

11 Q. You don't recall what 30-year period you
12 were referring to when you wrote that?

13 A. No, I do not.

14 Q. Okay.

15 A. This was a rough -- in other words, it's
16 been used a long time.

17 Q. Okay.

18 A. It's been in use a long time.

19 Q. And -- and, if I understood your testimony
20 correctly, PCB's started being used in transformers
21 in the early 1930's?

22 A. Yes.

23 Q. So, if you were talking about a 30-year
24 period, this would have to be written at least no
25 earlier than the early 1960's, correct?

1 A. Yes, this is correct.

2 Q. And that's when you think you wrote it, was

3 in the 1960's?

4 A. In the 1960's.

5 Q. Okay.

6 A. Yes.

7 Q. Now, if you would, turn to the page of that

8 document that talks about directions for handling.

9 I think it's pretty close to the front of it there,

10 not far after the introduction, maybe three or four

11 pages later. Right there, I think -- where it

12 talks --

13 A. Yes.

14 Q. -- about directions for handling?

15 A. For handling.

16 Q. And under that, there is a discussion of

17 "use ordinary personal precautions," correct?

18 A. Right.

19 Q. Where did you get the information that went

20 into that section on ordinary personal precautions?

21 A. This was obtained -- again, referring to

22 the introduction, this information was gathered, "as

23 the introduction says, by Monsanto based on the

24 experience of 30 years, of our experience and the

25 experience of transformer manufacturers. In the

1 introduction, some of the transformer -- the -- the
2 main transformer manufacturers are listed here; for
3 instance, General Electric Company, Westinghouse,
4 Allis-Chalmers. Others could be listed -- listed.

5 To answer your question, this was
6 derived from the experience of 30 years satisfactory
7 use in the industry.

8 Q. Well, for example, what I'm trying to find
9 out is whether or not you went to somebody in the
10 medical department at Monsanto to get the
11 information that's contained here or whether you got
12 that just from your own personal knowledge.

13 A. Not from my own personal knowledge.

14 Q. Okay.

15 A. This came from the knowledge that was
16 gathered from 30 years satisfactory use of Askeral.

17 Q. Okay. My question is --

18 A. And -- oh, excuse me.

19 Q. My question is: To whom did you go to get
20 the information about that 30-year history of
21 handling Askeral?

22 A. This came from the people here in the
23 industry manufacturing and using Askeral
24 transformers.

25 Q. Well, let me --

1 A. And -- okay.

2 Q. Go ahead. I'm sorry. I didn't -- I didn't
3 mean to interrupt you. I thought you were through,
4 but go ahead.

5 A. And -- you -- you asked about my
6 knowledge. There was no knowledge, as far as I'm
7 concerned no knowledge, of toxic or other ill
8 effects. So, I share this view. I share this view.

9 Q. Okay. Well, let me go back; and let's talk
10 about this document. And, in fact, why don't we
11 identify some other versions of it because I think
12 they're all essentially the same. And let's get
13 that done, maybe, before we talk about the details.

14 A. Okay.

15 Q. Let me also show you Documents 2378 through
16 2410, also labeled "Monsanto Askeral Inspection and
17 Maintenance Guide."

18 A. Okay.

19 Q. Document 2299 through 2331, also labeled
20 "Monsanto Askeral Inspection and Maintenance Guide"?

21 A. Yes.

22 Q. Document 212 through 240, also labeled
23 "Monsanto Askeral Inspection and Maintenance Guide;"
24 and Document 180 through 211, also labeled "Monsanto
25 Askarel Inspection and Maintenance Guide" but with

1 the name Allis-Chalmers down at the bottom.

2 A. Oh, all right.

3 Q. Now, what I want to ask you is whether all
4 those documents are basically copies of the same
5 document --

6 A. Right.

7 Q. -- containing the same information?

8 A. Right.

9 Q. Now, let me ask you, with regard to the one
10 that's got Allis-Chalmers written on it, why is
11 Allis-Chalmers name down there on the bottom of that
12 document that begins Page 180?

13 A. Allis-Chalmers made Askeral transformers,
14 was one of the people making Askeral transformers.
15 Allis-Chalmers requested this literature for -- to
16 use and our advertising -- I say "advertising" --
17 our literature department -- I think that's a more
18 correct nomenclature in these cases than saying
19 "advertising" -- our literature department agreed to
20 print some of these with their name on it --

21 Q. Okay.

22 A. -- as they would have for anyone else.

23 Q. Okay.

24 A. That occasions this.

25 Q. It was still the document that you had

1 prepared at Monsanto?

2 A. Yes. Now, there's an Allis-Chalmers person
3 listed here in the introduction as having
4 participated in the assembly and so forth of this
5 information.

6 Monsanto, realize, does not -- did not
7 make, design, manufacture -- that is, make, test,
8 install, or use transformers. We made the fluid.

9 Q. Right.

10 A. This is why the subject is "Askeral
11 Liquid." It is not subjected "Askeral
12 Transformers." It is -- the subject is "Transformer
13 Askeral Liquid." We're talking about the liquid.

14 Q. Certainly.

15 A. Now, these people who are listed here, they
16 are in that category of being representatives of
17 manufacturers and marketers, installers, of the
18 equipment.

19 Q. The document is, however, a
20 Monsanto-prepared document with information, in
21 part, you gained from others?

22 A. Correct.

23 Q. Okay. Now, I want to focus your attention
24 back on the paragraph that deals with ordinary
25 personal precautions.

1 A. All right.

2 Q. Again, just so we're clear, when we're
3 talking about Askeral, we're talking about PCB's
4 that Monsanto had the trade name of Aroclor for,
5 correct?

6 A. Yes.

7 Q. And are also just PCB's, correct?

8 A. (No response)

9 Q. They're polychlorinated biphenyls, right?

10 A. Not necessarily in all cases here.

11 Q. Is there any Askeral that does not contain
12 PCB's?

13 A. Well, if you go through the literature
14 and -- and look at the formulas, there were blends
15 of PCB's with other things.

16 Q. Yes. But is there any Askeral that does
17 not contain PCB's?

18 A. Oh, put that way, correct.

19 Q. Okay. There are different formulas for
20 blending --

21 A. Correct.

22 Q. -- PCB's to meet the specifications of
23 General Electric or Westinghouse or Allis-Chalmers
24 or whoever?

25 A. This is right.

1 Q. But they all contain PCB's?

2 A. Right.

3 Q. Or what Monsanto called "Aroclors"?

4 A. Right.

5 Q. Okay. Now, talking about these ordinary
6 personal precautions, we have that same -- this same
7 information in each one of these documents we've
8 just looked at --

9 A. Yes.

10 Q. -- each version of them.

11 Now, did you acquire information on
12 ordinary personal precautions from talking with
13 General Electric and Westinghouse and
14 Allis-Chalmers?

15 A. Not exclusively.

16 Q. Where else did you acquire information on
17 that?

18 A. Monsanto.

19 Q. And from whom at Monsanto did you acquire
20 such information?

21 A. Our plant people, as supported by the
22 industrial hygiene people.

23 Q. Are they in -- the industrial hygiene
24 people in the medical department?

25 A. Yes. They're with Dr. Kelly.

1 Q. So --

2 A. He was not the only one there.

3 Q. Okay. So, you would --

4 A. This is a consensus --

5 Q. Okay.

6 A. -- in other words.

7 Q. Okay.

8 A. It is a consensus, in-house and out-house.

9 Q. Okay. These are not just your thoughts?

10 A. That is right.

11 Q. They --

12 A. I acquired these thoughts. I was in an
13 office, like you are.

14 Q. And these thoughts, then, include the
15 thoughts of Monsanto's medical department?

16 A. These thoughts were certainly checked with
17 the medical department at some period in time.

18 Q. And they approved what you said?

19 A. They must have -- the -- the procedure was,
20 from a product group, as we went through before,
21 when literature like this is composed and then, in
22 the -- the writing department, I think we called
23 them rather than advertising, they would set up the
24 format.

25 Now, in-house at Monsanto, this is to

1 be passed onto the medical department.

2 Q. Okay.

3 A. So, I assume that it was done so.

4 Q. Okay. So, my -- my specific question is:
5 Was this directed for review to the medical
6 department?

7 And your answer is you think so.

8 A. I think so.

9 Q. Okay. Now, did you also have this
10 information on personal precautions reviewed by the
11 plant managers at the plants that made PCB's?

12 A. Not directly, no. No.

13 Q. Did you do it indirectly?

14 A. I would -- I would say, really, no, other
15 than -- to my knowledge -- this is my personal
16 knowledge -- I was not aware of anything that would
17 be contrary to this.

18 Q. Okay. But the actual review process, then,
19 at Monsanto involved what you knew and what the
20 medical department knew?

21 A. Correct.

22 Q. And nobody else, correct?

23 A. That is the answer to your question.

24 Q. Okay. Now, I note in this section on
25 ordinary personal precautions you state that Askeral

1 has been made, handled, and used for over 30 years
2 without causing toxic or other ill effects. Is that
3 what your statement was?

4 A. That's what it says.

5 Q. And you believe that to be true?

6 A. As far as I know.

7 Q. And would you consider anybody who might
8 get sick enough to seek medical attention having had
9 a toxic or ill effect?

10 A. Would what?

11 Q. If somebody who had made, handled, or used
12 Askeral had a sufficient medical problem to seek
13 medical attention, would you consider that a toxic
14 or ill effect?

15 A. Yes, I would consider that something to
16 call and go see the medical department.

17 Q. So, you --

18 A. Yes.

19 Q. You understood the statement here to mean
20 that nobody who had made, handled, or used Askeral
21 had ever gotten sick enough to need medical
22 attention, correct?

23 A. Essentially, yes.

24 Q. Okay. And certainly not to have died from
25 it?

1 A. That's right.

2 Q. Okay. Now, the next sentence says, "It can
3 be handled" -- and "it," you're talking about the
4 PC --

5 A. Askeral.

6 Q. Askeral, the material containing PCB's,
7 correct?

8 A. Right.

9 Q. -- "It can be handled with only minor
10 precautions"?

11 A. Yes.

12 Q. What did you consider to be minor
13 precautions?

14 A. What I would consider here to be minor
15 precautions is sensible cleanliness and avoidance of
16 long-term exposure to the skin or to the vapors; and
17 if it were to come in contact with the skin, to wash
18 the skin. That is how I interpret this.

19 What I am saying is: Our people, to
20 my knowledge, did not wear complete rubberized
21 suits. They wore ordinary clothes in our plants.
22 And --

23 Q. No special clothing?

24 A. No special clothing.

25 However, if accidentally it was

1 spilled, they would have removed their clothing
2 instead of continuing to wear the clothing with the
3 Askeral spilled over themselves.

4 Q. Okay. And you would have --

5 A. They would have washed themselves.

6 Q. Okay. You consider --

7 A. They did not wear special gloves and so
8 forth.

9 Q. They didn't have any special gear for their
10 hands or their feet or their heads or anything like
11 that?

12 A. No special gear, no helmets -- well, hard
13 hats for mechanical -- no space-age suits.

14 Q. Okay.

15 A. All right.

16 Q. Well, did they have space-age suits back
17 then?

18 A. (No response)

19 Q. That's a serious question. I mean, I have
20 seen -- you know, in recent years I have seen on TV
21 we -- we had a big chemical spill up here in East
22 Texas not too long ago, where a train ran off the
23 tracks. And on TV you could see people out there
24 with these white suits, all covered up.

25 Did they have stuff like that back

1 when you were writing this?

2 A. I would say not to the type that they have
3 now. They would -- they had protective clothing on
4 a severe situation.

5 Q. Okay. And it was your understanding that
6 the way Monsanto handled PCB's in their plants, they
7 didn't have any special protective gear for their
8 heads, their hands, their feet, or anything like
9 that?

10 A. This is correct.

11 Q. And you wouldn't consider special
12 protective gear for the head, the hands, the feet,
13 and stuff like that minor precautions, would you?

14 A. No. Those are unusual precautions.

15 Q. Okay. Now, you go on to say, "If it's
16 accidentally spilled on the hands no serious skin
17 irritation will occur"; is that correct?

18 A. That's -- that's what it says.

19 Q. Where did you get that information?

20 A. This information came from the consensus of
21 the people in the industry and from the experience
22 in Monsanto's plant -- plants. I would include
23 this.

24 Q. Now, where did you get the information on
25 the experience in Monsanto's plants?

1 A. I would say this was run through the
2 industrial hygiene people, again, in the medical
3 department.

4 Q. Medical department?

5 A. Yes.

6 Q. You go on to say that -- that, "If Askeral
7 is spilled on the hands, prolonged contact may lead
8 to drying and chapping of the skin"?

9 A. This is right.

10 Q. That's kind of like if you're out in the
11 winter wind and your skin dries out?

12 A. It's like if you have your hand in paint
13 thinner, is what it says here.

14 Q. Okay.

15 A. It removes the oils from the skin.

16 Q. Was there any problem that you suggested
17 resulting from prolonged contact with the skin,
18 other than drying and chapping?

19 A. Not to my knowledge.

20 Q. So, the one reason you'd want to --

21 A. However, I think if you'll go into this
22 further, it says if -- avoid prolonged contact with
23 the skin.

24 Q. My question is: The only thing that you
25 indicated might occur as a result of prolonged

1 contact was drying and chapping of the skin?

2 A. No. No.

3 Q. What -- where else do you indicate there's
4 any other problem that can result from prolonged
5 contact with the skin?

6 A. You're talking to me now.

7 Q. Yes.

8 A. Right. I am not a dermatologist nor an
9 MD.

10 Q. Yeah.

11 A. I have gone as far in my thinking on this,
12 not being a dermatologist or medical person, as I
13 can go. Now, I don't know -- you're asking me,
14 "What else?" This is a medical question.

15 Q. That's a different -- I'm sorry. Maybe I
16 didn't ask my question well.

17 I'm trying to find out what else you
18 told people in this document might result from
19 prolonged contact of PCB's with the skin, other than
20 drying or chapping?

21 A. I don't think anything --

22 Q. Okay.

23 A. -- in this document, no.

24 Q. Okay. So, if a person read what you wrote,
25 they would be reasonable in concluding that the

1 reason you wanted to avoid prolonged contact with
2 the skin was to keep it from chapping and drying,
3 correct?

4 A. I don't agree with that fully.

5 Q. Okay.

6 A. That's part of it.

7 Q. What else would they conclude would result
8 from prolonged contact with the skin?

9 A. I don't know what they would conclude.
10 Neither do I know what might conclude.

11 What is going to be said here is,
12 "Avoid long-term exposure"; and what is definitely
13 said, "If spilled, wash it off" -- "wash with soap
14 and water."

15 I cannot conjecture what might happen.

16 Q. Well, I -- that's --

17 A. I don't know. I don't know what you're
18 asking for. I don't --

19 Q. What -- what I'm trying to find out --

20 A. This is not a medical -- this is not a
21 medical dissertation.

22 Q. Well --

23 A. This is a consensus from people handling
24 Askeral in the transformer manufacturing area and in
25 our plants, their experience.

1 Now, I have no knowledge beyond what
2 I've said here. Now, if someone else does have
3 knowledge, I don't have it.

4 Q. Okay.

5 A. Would our medical people have it? I don't
6 know. You'd have to ask them.

7 Q. Well, let me ask you this. I'm just trying
8 to find out what you've said and what you think
9 people should have understood from it, because --

10 A. What I think people should understand from
11 what I said then, now, and at any time, this is not
12 soda pop. This material, it is said, "Avoid
13 prolonged contact with the skin. If there is skin
14 contact, wash in an ordinary way with soap and
15 water. No special washings are required."

16 And it also somewhere -- I'm -- I
17 can't read all of this at once -- somewhere it says,
18 "Avoid breathing the fumes and the vapors."

19 Now, my premise here is: If someone
20 adheres to this, they're going to be all right.

21 Q. Well, what was "prolonged contact"? If a
22 person contacted it during a shift when he was
23 working, would it be appropriate for him to wash
24 carefully at the conclusion of his shift?

25 A. If he had Askeral on his skin, he should

1 wash at the time -- immediately after it --

2 Q. He should wash --

3 A. -- in my opinion.

4 Q. -- immediately?

5 A. I would say so.

6 Q. Okay.

7 A. Then -- and this is not prolonged. An
8 eight-hour exposure is prolonged exposure.

9 Q. Did you say in here to wash immediately?

10 A. It says if -- if it contacts the skin, wash
11 it. Wash it --

12 Q. Doesn't say to do it immediately, does it?

13 A. Well, I don't know. It may say -- if they
14 wash the skin -- in case of contact -- in case of
15 contact, wash off the skin; in case of contact --

16 Q. Yeah.

17 A. -- wash it off.

18 Q. And by that, you meant to say, "In case of
19 contact, immediately wash off the skin"?

20 MR. CRAWFORD: Well, he said what he
21 said.

22 A. I -- these are the words I said.

23 Q. (By Mr. Lacey) Well, what I'm trying to
24 find out is: Do you read that --

25 A. What I say here, "Do not have prolonged

1 exposure. If contact, wash it off."

2 Q. And you think that should be done
3 immediately, correct?

4 A. Essentially -- I'm not agreeing with what
5 you indicated, that you go around eight hours with
6 it on during the work day.

7 Q. Well, that's what I'm trying to find out.

8 A. Oh, you better believe this is my intent.

9 Q. It was your intent that they immediately
10 wash?

11 A. If one contacts it -- if this happens, wash
12 it off.

13 Q. Immediately?

14 A. I would -- I would say that is -- this is
15 what I myself would do.

16 Q. Okay. And as far as clothing, was it your
17 intention that in the event PCB's got on clothing
18 that they should immediately remove that clothing
19 and change into fresh clothing?

20 A. Well, let me read this. Where is this --

21 Q. It's the same --

22 A. Oh, all right. "Wash off the skin with
23 soap and water." It says "remove."

24 Q. Yes. And my question --

25 A. Now, yes. I agree with you, immediately.

1 Q. Immediately is what you meant?

2 A. Let me say promptly, without undue delay,
3 reasonable promptness.

4 Q. Which doesn't mean at the end of a shift if
5 someone --

6 A. Oh, this is correct.

7 Q. Okay. Okay.

8 A. This is absolutely correct.

9 Q. Okay. And that's what you intended to
10 convey when you wrote these words?

11 A. This is right.

12 Q. Okay.

13 A. Without -- yes, this is absolutely the --
14 the intent.

15 Now, do you want to read about the
16 eye?

17 Q. If you want to. I don't have any questions
18 about it; but if you want to go into it, well,
19 fine.

20 A. Well, if it gets in the eye, it is going to
21 be irritate -- irritating. You can count on it.
22 But permanent damage -- it says, "no permanent
23 damage."

24 It says, "Flush with large amounts of
25 water," and then goes on to say, "See the eye

1 doctor."

2 Now, here again, the implication is
3 don't hang around eight hours to tend to this.
4 Promptly, if it gets in your eye, do something about
5 it. Wash it with copious amounts -- you'll want to
6 do it, believe me.

7 Q. Well, let me ask you about that. You
8 didn't advise anyone to see a physician if they got
9 it on their skin, only if they got it in their eye,
10 correct?

11 MR. CRAWFORD: Well --

12 A. This is correct --

13 MR. CRAWFORD: Wait.

14 A. -- on short-term contact yes.

15 MR. CRAWFORD: He said, "recommend
16 that they see a physician." I don't see that in
17 there.

18 THE WITNESS: Here. "To relieve the
19 irritation, physicians have used" -- well --

20 MR. CRAWFORD: Yeah, but doesn't
21 say -- okay. It says what they --

22 A. "If Askeral" -- "flush with large amounts
23 of water as with all eye first aid."

24 MR. CRAWFORD: So --

25 MR. LACEY: "Refer to a physician," do

1 you see that, Walter.

2 MR. CRAWFORD: Yeah, but --

3 THE WITNESS: Yes.

4 MR. CRAWFORD: Oh, you mean it -- it
5 mentions a physician, but it doesn't say go to one.

6 MR. LACEY: Well, it says, "refer to a
7 physician."

8 THE WITNESS: It says, "refer to a
9 physician."

10 Q. (By Mr. Lacey) Mr. Benignus, doesn't --

11 A. Yes.

12 Q. -- "refer to a physician" mean go to a
13 doctor?

14 A. Yes.

15 MR. CRAWFORD: Okay.

16 A. And this is the meaning of it, yes.

17 MR. CRAWFORD: Okay.

18 Q. (By Mr. Lacey) Okay. Anything else you
19 want to comment on that? Are you satisfied?

20 A. No. I'm satisfied.

21 Q. Okay.

22 A. You know what my meaning is here. There's
23 no use for us to debate this thing --

24 Q. I think you're right.

25 A. -- further.

1 Pardon?

2 Q. I think you're right. That's a matter that
3 the jury can resolve for us.

4 Let me show you another document, 2267
5 through 2298. And this is "Monsanto Askeral
6 Inspection and Maintenance Guide, Revised September,
7 1963." Do you see that on the cover --

8 A. Yes.

9 Q. -- where it says "revised"?

10 Now, is that a subsequent version to
11 the ones we've been looking at?

12 A. I would say so, yes.

13 Q. So, the others must have been written
14 sometime before September, 1963?

15 A. Yes.

16 Q. If you would, find the section in that
17 revised version that deals with the handling
18 procedures and look at it and tell me whether those
19 are the same as the ones in the previous nonrevised
20 version.

21 A. Looks the same to me.

22 Q. Okay.

23 A. To me, it -- it's the same.

24 Q. All right. Now, let me direct your
25 attention to some more Askeral Inspection and

1 Maintenance Guides. First, I want to show you
2 Document 2450 through 2477. This has got a
3 different cover on it --

4 A. Yes, it does.

5 Q. -- but is that another version of that same
6 inspection and maintenance guide that you prepared?

7 A. It encompasses it, yes, plus there is more
8 information in this. It's an -- it has addition to,
9 expansion of, enlargement of.

10 And the date -- do you have the date
11 of this?

12 Q. Well, I was going to ask you about that.

13 A. I would say 1975.

14 Q. 1975?

15 A. I think that's the date.

16 Q. Okay. I've got one --

17 A. I can't read it there. The date isn't on
18 here. It's blocked off there. But that, I think --
19 do we have any other copy of that?

20 Q. I've got some other copies that indicate
21 they were revised. I have one that indicates it was
22 revised in March of '75, and another one indicating
23 it was revised in August of '76. But this one
24 apparently is not the revised one.

25 Now, I wondered if maybe you could

1 help me try to date this. Were -- were you involved
2 in this?

3 A. I was not there.

4 Q. When this was done?

5 A. When this was done.

6 Q. I see. So, the language in this document
7 is sometime after your retirement in 1974?

8 A. Correct.

9 Q. Okay. Were these inspection and
10 maintenance guides that we've previously looked at,
11 in particular the one that was revised in September
12 of 1963, the one that remained in use until the time
13 that you retired?

14 A. Yes. I don't know of anything other.

15 Q. Okay. Let me -- let me get that copy back
16 from you.

17 So, if I understand correctly, the
18 document marked 2267 through 2298 was the Askeral --
19 "Monsanto Askeral Inspection and Maintenance
20 Guide" --

21 A. I think the wire broke.

22 Q. Uh-huh. Let's -- let me see if I can help
23 you get that hooked back together here. I think it
24 just popped out of your holder.

25 A. Yeah. Oh, I see.

1 Q. There you go.

2 A. Thank you.

3 Q. Let me -- let me go back and ask that
4 question, and let me have the document back so we
5 can get it clear.

6 A. (Witness complies)

7 Q. If I understand your testimony, then, the
8 "Monsanto Askeral Inspection and Maintenance Guide"
9 revised September, 1963, Document No. 2267 through
10 2298, was the document that Monsanto made available
11 about its transformer Askeral from 1963 until your
12 retirement in 1974?

13 A. (Witness nods head)

14 Q. Is that correct?

15 A. I would say that is correct.

16 Q. And, then, the document that I've shown
17 you, another updated "Monsanto Inspection" --
18 Askeral Inspection and Maintenance Guide, Document
19 2450 through 2477, is an updated revision that
20 didn't come out until after you had left Monsanto in
21 1974?

22 A. This is correct.

23 Q. And you didn't have anything to do with
24 updating that inspection and maintenance guide?

25 A. Right.

1 Q. And, then, when we come to the "Monsanto
2 Transformer Askeral Inspection and Maintenance
3 Guide," revised March, 1975, Document 241 through
4 268, that's a revision of the one I've just shown
5 you, but, again, prepared after your retirement,
6 correct?

7 A. Correct.

8 Q. And, then, when we come --

9 A. This has the date on it.

10 Q. Yes, it does.

11 A. Yeah.

12 Q. That's a revision of the one --

13 A. Oh, I see.

14 Q. -- that doesn't have a date.

15 A. All right. Well, is it? Well --

16 Q. I believe it is.

17 A. Yeah, it seems to be.

18 Q. You'll note that the first one doesn't have
19 the "R" in the number.

20 A. Doesn't have an "R" in what number?

21 Q. Let me show you here.

22 A. Oh, all right. All right. You're
23 looking. 38 and this is 38-R.

24 Q. You'll see this is known as both the No.
25 IC/FF-38 --

1 A. Right.

2 Q. -- and the one that was revised in March of
3 1975 is IC/PP-38-R.

4 A. This is right.

5 Q. And then let me show you the last one,
6 "Monsanto Transformer Askeral Inspection and
7 Maintenance Guide," Document 2478 through 2505.
8 You'll note it has the same bulletin number,
9 IC/PP-38 --

10 A. Right, R-2.

11 Q. -- but it's R-2 and shows it was --

12 A. '76.

13 Q. -- revised August, '76.

14 A. Exactly.

15 Q. So, all three of those last ones that all
16 have the different cover on them -- could you just
17 hold one of those up so the camera can see what the
18 cover looks like?

19 A. (Witness complies)

20 Q. Those "Transformer Askeral Inspection and
21 Maintenance Guides" were all produced after 1974,
22 when you retired?

23 A. This is right.

24 Q. Okay. Fine. And you, then, wouldn't know
25 who put in the information on toxicology and

dermatology in those documents?

A. No.

Q. You --

A. I wasn't there.

Q. You wouldn't claim any responsibility for it at all; is that correct?

A. I wasn't there.

Q. Okay. Well, I guess what I'm asking you is: You weren't working on a revision of that document before your retirement or anything?

A. No.

Q. Okay. Let me show you some more documents that relate to transformers and Askeral.

First, let me show you a document called, "When Specifying Transformers, Here's How To Get More Money and" -- "More Performance and Save Money," a document O/FF-14, with No. 2411 through 2425.

Have you seen that document before?

A. Not in this form. I've seen it --

Q. Did you --

A. -- in a different form.

Q. Okay. And what is different? The cover?

A. The -- the -- not only the cover; but it was a folder, about this large, that unfolded.

1 Q. I think if you'll look at that, that may be
2 a copy of such a document that did unfold because as
3 you look inside --

4 A. It has to be.

5 Q. Okay. When this thing was originally in
6 Monsanto's manufacture, it was something that folded
7 out into a longer sheet?

8 A. Yes.

9 Q. Okay. Does that appear to be a copy of
10 that folder that you've previously seen?

11 A. Right.

12 Q. Did you have --

13 A. Yes.

14 Q. -- anything to do with preparing that
15 folder?

16 A. I know when it was prepared. And this was
17 prepared by a writer in the advertising department,
18 and I'm aware of this. It has some of the same
19 statements in it that our maintenance guide has in
20 it.

21 Q. Let me ask you to look at the page that's
22 labeled -- or the section that's labeled "Why
23 Askeral," close to the front.

24 A. Oh, yes, "Why Askeral."

25 Q. It says there "For almost 40 years Askeral

1 transformers," and goes onto describe it. That
2 would indicate, would it not, that this document was
3 written around 1970?

4 A. No. I appreciate your analysis here. If
5 you will -- and this is what I was looking at -- it
6 says "30 years" elsewhere.

7 Q. Well, yeah. In the documents you wrote in
8 the early 60's, it said 30 years?

9 A. So does this.

10 Q. Well, here it says "40 years."

11 A. I do not disagree.

12 Q. You think that's --

13 A. That's right.

14 Q. -- a typographical error?

15 A. This is lightweight. It's a leaflet, is --
16 is what it is, put out by a writer in the -- in our
17 advertising department.

18 Here, "There are many examples of over
19 30 years of trouble-free operation," 30 years. Now,
20 here, 40 years is used. This -- this is nothing
21 critical. It has no significance --

22 Q. I understand.

23 A. -- is what I am saying to you.

24 Q. Well, I'm just trying to figure out when
25 the document was written. And if, in fact, it were

1 true that for almost 40 years Askeral transformers
2 had been used then this document would have been
3 written in the early Seventies or around that?

4 A. I think you're right.

5 Q. Okay. Do you believe it was, in fact,
6 written around 1970?

7 A. No.

8 Q. When do you believe it was written?

9 A. This was written in the mid 1960's.

10 Q. Okay. So, this is a little bit of
11 overstatement when it says 40 years?

12 A. It's an aberration.

13 Q. Okay. Now, there are -- strike that.

14 What was the purpose of this pamphlet?

15 A. Let's look at the pictures --

16 Q. Okay.

17 A. -- if we may.

18 Q. Be happy to.

19 A. Here's a building similar to what we have
20 where we are. Here's another one. Here is a
21 shopping center. If -- if I might -- am I going too
22 fast?

23 Q. No. Fine.

24 A. Here is -- is this a school? This is a
25 school, evidently.

1 Q. Okay.

2 A. Has the flag. This is --

3 Q. Looks like a space needle in Seattle or
4 something.

5 A. Yes. It's a commercial area. Here we have
6 some more. You'll see here a hospital --

7 Q. Uh-huh.

8 A. -- high-rise; again, shopping center;
9 industrial load center; schools --

10 Q. Uh-huh.

11 A. -- we were right on that.

12 That's the end of the pictures.

13 Now, here's a transformer.

14 Q. Right.

15 A. This is a leaflet, a flier, that indicates
16 the use, the popular use, and location of Askeral
17 transformers. What this is saying, as you can see
18 from the pictures, the place, the location, of use
19 of an Askeral transformer, in general it is used in
20 a populated -- people -- populated area where
21 judgment has been made that warrants spending the
22 increased money to have a transformer that is fire
23 resistant. Now, that is the overall premise for the
24 application of Askeral transformers. I could add
25 other places.

1 Q. Uh-huh.

2 A. Now, the purpose of this is to go to makers

3 of Askeral transformers, just as you have there,

4 Allis-Chalmers. They got this, too, as did other

5 transformer makers. Insurance people would get

6 this. Architects and contractors would get this.

7 They build these buildings. The engineering

8 department, the maintenance department, the design

9 department, what have you, of industrial places;

10 such as, the automotive industry; such as, flour

11 mills, places that are dusty, cement plants, and so

12 forth, places where there is anticipated to be water

13 exposure, this kind of thing.

14 This is for general information and

15 circulation.

16 Q. Is it fair to say that this was designed

17 not only to go to people who manufactured

18 transformers, but, also, to people who might specify

19 transformers?

20 A. Yes.

21 Q. And the goal was to encourage those people

22 to specify Askeral or PCB transformers in locations

23 that Monsanto and others thought were good ones for

24 PCB transformers?

25 A. Where Monsanto -- wait a minute. I'm going

1 to change this.

2 Q. Feel free.

3 A. Where Monsanto was informed that the
4 consensus of people who had -- were in position to
5 select transformers did, indeed, select Askeral
6 transformers and install them in those locations.
7 And some of those are represented here.

8 Q. Well, you can agree with me that in some of
9 these particular uses, there were other non-PCB
10 products that might be competing to be the
11 transformer selected by, say, an architect for a
12 particular use, can't you?

13 A. In these applications that are depicted
14 here, I would not put a mineral oil transformer,
15 neither would the insurance people --

16 Q. Well, I guess --

17 A. -- to give an example.

18 Q. I guess I'm trying to find out whether this
19 document was designed to put out information that
20 Monsanto thought was appropriate to get architects,
21 builders, and owners to say that they wanted Askeral
22 transformers.

23 A. Correct. And it stems from our knowing
24 that this is, indeed, what was in vogue and was
25 being done.

1 Q. I understand.

2 A. Correct.

3 Q. And one of the reasons Monsanto would be
4 interested in people specifying Askeral transformers
5 is because Monsanto made all the PCB's that went
6 into those transformers?

7 A. I think that is obvious.

8 Q. And the more Askeral transformers that were
9 specified, the more PCB's Monsanto could make and
10 sell, correct?

11 A. Correct.

12 Q. Okay. And that's why you would be
13 interested in putting out literature to encourage
14 people to use Askeral transformers?

15 A. Correct.

16 Q. Okay. Now, there -- in this literature is
17 a discussion not only of Askeral transformers, but
18 what Monsanto believed were the advantages of
19 Askeral transformers over other transformers that
20 might be used, correct?

21 A. Oh, I'll say "yes." And we didn't think a
22 mineral oil transformer would have any advantage.

23 Q. Right. And you even compared them to
24 dry-type transformers?

25 A. Correct. Now we are in gear.

1 Q. Okay.

2 A. Right.

3 Q. And one can compare the fire capabilities,
4 noise capabilities, the need to build a vault to
5 maintain ---

6 A. Water exposure, dust exposure, and hazards
7 from that sources in the case of a open dry-type.
8 In other words, really there are places where one
9 should not install an open dry-type transformer.

10 Q. Okay. Now, there are potential problems
11 with Askeral transformers in places like office
12 buildings and schools, are there not?

13 A. Any piece of electrical apparatus can be --
14 no piece of electrical apparatus, transformer, no
15 matter what it is, that doesn't have something to be
16 concerned about.

17 Is this what you were asking?

18 Q. Yeah. I guess just in view of this
19 advertising literature ---

20 A. They can all explode, for example.

21 Q. Yeah. And --- and the explosion of a PCH
22 transformer can cause problems, just like the
23 explosion of an oil transformer?

24 A. Or of a dry-type transformer.

25 Q. Certainly.

1 A. They could cause more problems.

2 Q. Well, are you familiar with the transformer
3 that exploded in the office building in Binghamton,
4 New York?

5 A. I heard of that. That was after I left.

6 Q. But you've heard about that problem?

7 A. I've heard about that.

8 Q. And do you know what happened up there?

9 A. In a general way, yes. It was -- the
10 transformer exploded. It was in a -- this was a
11 very rare incident of -- of a failure. Now --

12 Q. But it contaminated the whole building with
13 PCB's, didn't it?

14 A. You said "exploded." I don't know that it
15 exploded. I was not in the area on this.

16 Q. I understand. What have you heard?

17 A. There was a failure, let me say.

18 Q. Yes. And that resulted in the building
19 being contaminated with PCB's, did it not?

20 MR. CRAWFORD: Just tell him what you
21 know, Mr. Benignus. Answer his question.

22 A. Well, the building was contaminated with
23 PCB.

24 Q. (Hy Mr. Lacey) And that building stands
25 vacant to this day because of that problem, doesn't

1 it?

2 MR. CRAWFORD: If you know.

3 A. I don't know. I have not -- this is after
4 my time.

5 Q. (By Mr. Lacey) You really haven't followed
6 what's happened to PCB's since your retirement?

7 A. I have not. And the kind of incident that
8 you're talking about is very rare. The incident of
9 failure, as judged by the Edison Electric Institute
10 when I was involved, was of the order of a few
11 hundredths of a percent per year, which is, indeed,
12 very low.

13 So, I do know that, in later years,
14 there was this failure. You said in -- in New
15 York?

16 Q. Binghamton, New York.

17 A. Binghamton, New York.

18 Q. Okay. You just haven't followed up on what
19 happened in things like that?

20 A. No.

21 Q. Okay. In this particular literature about
22 specifying transformers, the reference is made to
23 normal good housekeeping. What is "normal good
24 housekeeping" as that term is used in a document
25 like this?

1 A. I would say "normal good housekeeping"
2 means that if there is a spill, in accordance with
3 good housekeeping -- and it says in this
4 literature -- put sawdust down, soak it up in
5 sawdust or rags or what have you.

6 What I'm saying is don't spill it
7 around. And if it gets on your clothes, it
8 encompasses this. Reasonable care and cleanliness.
9 Change your clothes if it spills onto you, yes.

10 Q. Change your clothes immediately, would that
11 be what you'd think "good housekeeping" would be?

12 A. That's what I would -- what I would say,
13 yes.

14 Q. Well --

15 A. Don't continue to wear that clothing. It
16 doesn't mean you have to jump up, you know, and get
17 all excited. But it does say if it spills on your
18 clothes, change it.

19 Q. Okay. Now, you're not saying this
20 particular document we've just been looking at,
21 "When Specifying Transformers Here's How to Get More
22 Performance And Save Money," talks about changing
23 clothes or anything like that?

24 A. I don't know.

25 Q. Well, do you want to take a look at it?

1 A. I don't know.

2 Q. I don't think it says anything like that in
3 there.

4 THE VIDEOGRAPHER: Excuse me. I need
5 to go off the record.

6 MR. CRAWFORD: Do you want to take a
7 break for lunch? It's 12:00 --

8 THE VIDEOGRAPHER: The time is 11:57
9 a.m.

10 (Noon Recess)

11 THE VIDEOGRAPHER: We are now back on
12 the record. The time is 1:03 p.m.

13 Q. (By Mr. Lacey) Mr. Benignus, let me hand
14 you again a document we were looking at before the
15 break, Document 2411 through 2425, Document O/FF-14
16 in Monsanto's nomenclature, entitled "When
17 Specifying Transformers, Here's How to Get More
18 Performance and Save Money," and ask you whether
19 that document, anywhere in it, indicates that if a
20 person gets PCB-containing Askeral fluid on them
21 they should change their clothing immediately.

22 A. I don't think it does. I paged through
23 it. I don't find that.

24 Q. Now, did you have anything to do with the
25 writing of the language in this document that you're

1 looking at?

2 A. Our advertising writer wrote this.

3 Q. You didn't review it for accuracy or
4 anything else?

5 A. Well, it's a very light document. There's
6 no technology in this thing at all. So, I may not
7 have been involved in it. I know what he was doing
8 was sending out a leaflet to try and get the name
9 Askeral and show a picture of an Askeral
10 transformer, call that to the attention of people
11 who do use transformers. That was the purpose of
12 it.

13 It's not a technical thing. It's no
14 technology in it. There's no toxicology,
15 dermatology, or medical. It's just a very nebulous
16 kind of a thing to, hopefully, enhance the
17 popularity of Askeral. At least people would have
18 heard the name.

19 Q. Are you telling me the document is not
20 necessarily accurate?

21 A. No, I'm not saying that. I'm saying it's
22 not a heavyweight document and it doesn't get
23 into -- other than comments, general comments, about
24 Askarels. There are many examples of over -- over
25 30 years of trouble free operation, makes statements

1 like that. I would agree with. It says Askeral
2 fluids are fire resistant.

3 MR. CRAWFORD: Mr. Benignus, if you'll
4 try to just answer his question, we'll move along a
5 little faster if you do that. I think he'd
6 appreciate that; and we would, too.

7 A. What was it?

8 Q. (By Mr. Lacey) Let -- let me ask you to
9 take a look now at the Document 2332 through 2346
10 and ask if that's another copy of this same document
11 called "When Specifying Transformers, Here's How" --

12 A. Yes.

13 Q. -- "To Get More Performance And Save
14 Money"?

15 A. Yes, it is.

16 Q. Okay. Now, let me show you some more
17 documents. Let me show you Document 2426 through
18 2437, also entitled "Here's How to Get More
19 Performance and Save Money When Specifying
20 Transformers," a similar title to the preceding one,
21 and ask you to take a look at that briefly.

22 A. I've looked at it.

23 Q. Now, that document has on it at the front
24 an indication that it was a new document created in
25 August of 1967; is that correct?

1 A. I would think that that's about correct.

2 Q. Okay.

3 A. I don't know where that comes from, but I
4 would agree.

5 Q. That handwriting was on the document when
6 it came to me from Monsanto. I don't know who wrote
7 that there, but that is what's written on that
8 document.

9 A. I would agree with that. I would --

10 Q. And if you turn to the inside page of the
11 document, it talks about -- I think you need to
12 maybe turn one more page.

13 A. Okay.

14 Q. Or maybe that's the page. No, turn one
15 more page.

16 A. (Witness complies)

17 Q. It talks about Askeral transformers having
18 been used for 37 years?

19 A. Yes, I noticed this, looking at it; but you
20 look further back, you get back to 30 years. This
21 is a little bit loose.

22 Q. Well, what I was going to look at, I mean,
23 if this document, in fact, was new in 1967, would 37
24 years be correct; that is, from 1930 to 1967?

25 A. Well, that would be 37 years.

1 Q. Okay.

2 A. But whether that is accurate, I don't
3 know. You run into the statement back here, 30
4 years of trouble free service.

5 Q. Right.

6 A. I'd hate to say there was seven years of
7 troubled service.

8 Q. I understand. Look back at the back of the
9 document. Do you find a code number on -- anywhere
10 at the back that helps you tell when it was
11 produced?

12 A. The thing I could decipher here is '67, if
13 that is it.

14 Q. Yeah. That would be consistent with the
15 note on the front?

16 A. It would, and consistent with these other
17 things. I know when this thing was put out.

18 Q. Now, who was responsible for putting out
19 that document?

20 A. The same writer. And it's the same tenor
21 of things.

22 Q. And was it intended for the same market,
23 people who --

24 A. Yes, same purpose.

25 Q. To encourage people to use Askeral

1 transformers?

2 A. To call Askeral to their attention; and,
3 hopefully, that it would leave a favorable
4 impression, yes.

5 Q. Then the whole point is to get them to
6 specify Askeral transformers?

7 A. Yes.

8 Q. So that there will be more sold and more
9 demand for Monsanto's PCB Askerals?

10 A. That's what we said before, right.

11 Q. Okay. Now, this document also talks about
12 Askeral transformers and handling them, does it not,
13 where it says, "Let's get all the facts on the
14 table?" Can you find that section of the --

15 A. What page -- oh, what page is it?

16 Q. It appears to be on Page 5. But I'm not
17 sure if I've got an exact duplicate of yours or not,
18 but the page on the document seems to be Page 5.

19 A. And -- and what was your question, again?

20 Q. There's a section called, "Let's get all
21 the facts on the table."

22 A. Oh, yeah, I -- I have it.

23 Q. And there it indicates that Askeral fluids
24 have been manufactured handled and used safely for
25 37 years; is that correct?

1 A. Yes, that's what that says.

2 Q. And, again, that would be consistent with
3 the period from 1930 to 1967, correct?

4 A. Right.

5 Q. And when you hear a phrase like "They've
6 been manufactured, handled, and used safely for 37
7 years," that would imply people haven't gotten
8 injured as a result of them, correct?

9 A. That is the implication, yes.

10 Q. And then there's this discussion again
11 about standard normal good housekeeping practices,
12 correct?

13 A. Right.

14 Q. The same sort of standard good housekeeping
15 practices that you would use with other industrial
16 materials, right?

17 A. Yes, that's what it says.

18 Q. Doesn't indicate any -- any precautions are
19 needed with PCB's other than what you would use with
20 other industrial materials, correct?

21 A. That's what it says.

22 Q. Okay. Now, let me hand you another
23 document with the same title, "Here's How to Get
24 More Performance and Save Money When Specifying
25 Transformers" -- this is Document 2438 through

1 2449 -- and ask if this is the same document, only
2 an updated version, that, according to the code,
3 would have been produced in June of 1971.

4 MS. OLSEN: What were those pages
5 again? I'm sorry.

6 MR. CRAWFORD: What's the beginning
7 page there, Mr. Benignus?

8 THE WITNESS: This?

9 MR. CRAWFORD: Yeah, right here?
10 2438.

11 MS. OLSEN: Okay.

12 A. Well, here you come into this number we
13 don't know of 71. I'm a bit confused by this, say,
14 1971.

15 Q. (By Mr. Lacey) Let me show you right
16 here -- I believe there's a code number right here,
17 which indicates --

18 A. Yeah.

19 Q. -- 06-71 --

20 A. -6.

21 Q. Yes. That would indicate June of '71,
22 wouldn't it?

23 A. I cannot say this. I'm confused with that
24 one.

25 Q. Okay.

1 A. I don't know if that's -- that strange '71
2 we've been running into on all of these things or
3 whether maybe the year here is '66, which is --
4 correlates with the time these -- which is in
5 correlation with the time that these things were put
6 out.

7 Q. Okay. Well, let me show you something else
8 on that same page. We have a list of the district
9 sales offices for all divisions, do we not?

10 A. Yes.

11 Q. And down at the bottom of the section that
12 has that list there's the notation 4/71, isn't
13 there?

14 A. I see this, correct.

15 Q. And that indicates that that list of
16 district sales offices is as they existed in April
17 of 1971, is it not?

18 A. I would say so.

19 Q. So, we know that the document is after
20 April of '71, then?

21 A. That is what it -- I would have to agree
22 with that --

23 Q. Okay.

24 A. -- based on the numbers. And I do not
25 disagree with that.

1 Q. Yeah. And, so, it would certainly not be
2 illogical, then, that it could have been published
3 in 6-71, as the code would indicate, two months
4 after they prepared the list of district offices?

5 A. Excuse me?

6 Q. The code number, the long code number, not
7 the district office number, but the long code number
8 at the bottom of that same page is 06 -- names the
9 numbers 06-71, does it not?

10 A. I think so, yes.

11 Q. And that could be indicative of June of 71,
12 wouldn't it?

13 A. Oh, yes.

14 Q. And it would make sense that this could
15 have been published in June of '71, after the
16 district sales office list was prepared in April of
17 '71?

18 A. Yes.

19 Q. Or sometime thereafter?

20 A. Yes.

21 Q. Okay.

22 A. It must have been a revision of earlier.

23 Q. Exactly, a revision of the document we
24 first saw that was prepared in August of '67,
25 correct?

1 A. Yes.

2 Q. Okay.

3 A. And this is a revision of that in '71.

4 Q. Let me show you a Document No. 2265 through
5 2266 and ask if you can identify that document.

6 A. Yes.

7 Q. Who prepared that document?

8 A. The same person.

9 Q. Okay. Somebody in this advertising group?

10 A. Yes, an advertising writer.

11 Q. Do you know when that document was
12 prepared?

13 A. It's -- pardon?

14 Q. Do you know when that document was
15 prepared?

16 A. I would say this one was prepared in the
17 approximate time period of mid '66, as are these,
18 other than what you've shown here, come up with a
19 revision of one that was prepared. So, I put that
20 into the time frame. Whether it's a revision or
21 not, this, I don't know. I don't see the -- the
22 date of issue.

23 MR. CRAWFORD: David, let me just --
24 can I ask just a few questions to get this straight,
25 because I'm not sure that what's gone on here has

1 been dead accurate.

2 MR. LACEY: Well --

3 MR. CRAWFORD: I don't see any
4 difference between 2426, that series, and 2438
5 except that there is attached to it a list of
6 district offices. So, to say this is --

7 MR. LACEY: It may well be another
8 reprinting, Walter.

9 MR. CRAWFORD: Okay.

10 MR. LACEY: That's what we've seen,
11 here are various reprintings --

12 MR. CRAWFORD: Right. But you said
13 "revision."

14 MR. LACEY: -- with no changes.

15 MR. CRAWFORD: It's really not a
16 revision. It's the same -- actually the same
17 document exactly. The only difference is it's got
18 the offices attached to it.

19 MR. LACEY: Well, which is a
20 difference between the two documents.

21 MR. CRAWFORD: The only difference.
22 But the document could be the same, just with the
23 offices attached on.

24 MR. LACEY: No problem with that.

25 MR. CRAWFORD: And the offices could

1 have been what would be revised in '71. So, it
2 could be the same thing.

3 MR. LACEY: But reprinted in '71.

4 THE WITNESS: Reprinted. The word
5 "revised" --

6 MR. CRAWFORD: Well, not even
7 reprinted, but maybe sent out. And -- well, at
8 least we know the addition of the offices was
9 apparently '71.

10 MR. LACEY: Exactly.

11 MR. CRAWFORD: That's all we can
12 really say.

13 MR. LACEY: That's fine. And
14 that's --

15 THE WITNESS: Well, that's an
16 interesting point, too, isn't it?

17 MR. LACEY: Yeah. That would be
18 fine.

19 Q. (By Mr. Lacey) That would mean that
20 Monsanto, in 1971, is giving out the very same
21 information it gave out when the document was first
22 printed in '67?

23 A. Yes. One would have to --

24 Q. And certainly if there were a change in the
25 information that Monsanto knew between 1967 and

1 1971, it would be appropriate to modify the
2 documents to incorporate new information before it
3 was sent out, wouldn't it?

4 MR. CRAWFORD: Well, if you know it
5 was sent out in '71, Mr. Benignus, just concentrate
6 on what you know.

7 A. Well, I don't know. All I -- I'm trying to
8 follow along here. I told you, I'm somewhat
9 confused with that one.

10 Q. (By Mr. Lacey) Well, you-all didn't
11 prepare these books to have them sit on the shelf,
12 did you?

13 A. I didn't, no.

14 Q. They were prepared to be given to people
15 who would be specifying transformers?

16 A. Yes.

17 Q. And, so, if you add a list of district
18 sales offices to a document and print it, you're
19 preparing to have it sent out, correct?

20 MR. CRAWFORD: If that's, in fact,
21 what happened.

22 A. If that is what happened, yes.

23 Q. (By Mr. Lacey) Well, let me -- let me just
24 make sure what --

25 A. This here --

1 MR. CRAWFORD: These are exactly the
2 same here, apparently.

3 A. You see, what's being said, that this
4 literature is exactly the same -- you know, somebody
5 could have punched this addition onto this thing.

6 Let me say this -- I'm pretty sure I'm
7 correct of this -- these folders that these are --
8 see, this didn't go out in this form. They went out
9 in a folder. Those folders did not have added to
10 them this.

11 Q. (By Mr. Lacey) So, you're telling me when
12 Monsanto gave me that document as an entire
13 document --

14 A. I think that's a --

15 Q. -- they made a mistake?

16 A. I think this is an aberration.

17 Q. Okay.

18 A. I really do. This is why I am telling you
19 I am confused with it. I think this is an
20 aberration because I know that this that came out
21 did not have this with it.

22 MR. LACEY: Walter --

23 A. So, how this got on there, I do not know.

24 MR. LACEY: Let me make it clear on
25 the record: We've got a problem with documents with

1 this witness saying that's not the way the documents
2 came, and what you--all presented to me was that
3 right there as a document of Monsanto.

4 MR. CRAWFORD: David, I don't know
5 what the situation -- whether that was attached to
6 it or not. I mean, Mr. Benignus would --

7 MR. LACEY: Mr. Benignus is 30(b)(6)
8 corporate representative on the advertising of
9 Monsanto on dielectrics.

10 Q. (By Mr. Lacey) And that's advertising on
11 dielectrics, is it not, Mr. Benignus?

12 A. In that category, yes.

13 Q. And you're here as a designated
14 representative of the company today telling me that
15 that document isn't really a copy of the way the
16 Monsanto documents were in their file, correct?

17 A. I -- this is my opinion of this thing.

18 Q. Okay. And you're the designated
19 representative of the company and saying that?

20 A. I am saying that.

21 Q. Okay. And I can rely on what you're
22 saying?

23 A. You can.

24 MR. CRAWFORD: Let me --

25 A. I don't know how this -- I cannot account

1 for this.

2 Q. (By Mr. Lacey) Okay. It doesn't make
3 sense; it shouldn't be that way. Is that correct?

4 A. It doesn't make sense to me. You don't
5 find this on any of the other --

6 Now, I think there's something in
7 addition to this. Let's look if there, whatever. I
8 don't know.

9 Q. Those are the only two documents of that
10 particular type they've given us, and one has it and
11 one doesn't.

12 A. Well, this was in the time frame.

13 Q. Now, when you're talking about "this,"
14 you're talking about the Document 20 -- let me look
15 here -- 2265, 2266.

16 A. Uh-huh.

17 Q. And that was -- that was -- when you say
18 "in the time frame," you're talking about in the mid
19 1960's?

20 A. Mid 1960's.

21 Q. Okay.

22 A. That's where I would put this thing. And
23 there is there 1967.

24 I stand confused by this.

25 Q. And the confusion arises from the fact that

1 the document that Monsanto has produced us in this
2 case that's numbered 2438 through 2449 doesn't look
3 in its entirety like the documents you recall
4 Monsanto having?

5 A. It -- I recall -- in my opinion. I could
6 be wrong. I don't know.

7 Q. Okay. Well, you're the representative of
8 the company; so, we're going to have to rely on what
9 you say about it.

10 A. So, I can't be wrong, huh?

11 Q. That's -- that's about what it amounts to.
12 They're representing that you're the person who
13 knows.

14 A. Well --

15 MR. CRAWFORD: I think he's a person
16 with knowledge about this. I don't know --

17 MR. LACEY: Well, let me make it very
18 clear. I asked for the company to designate the
19 person with the greatest knowledge so I wouldn't
20 have somebody coming in and saying --

21 MR. CRAWFORD: Well --

22 MR. LACEY: -- "Oh, he didn't know
23 what he was talking about."

24 MR. CRAWFORD: Well, he is a person
25 with knowledge. And whatever --

1 A. That is my best judgment.

2 Q. (By Mr. Lacey) Okay.

3 A. IF I'm wrong, I stand being corrected
4 and --

5 Q. Let me show you another document, now,
6 called "The Care and Grooming of Askeral Transformer
7 Fluid," Document 2506 through 2521 and --

8 A. Right.

9 Q. -- can you tell me about that?

10 A. And I will look for what do you think?

11 I do not find what they have there. I
12 do find this.

13 Q. Which is what?

14 A. Well, this, now -- or these district
15 offices. This is a list of district offices.

16 Now, let me look at this other one.
17 That, too, is a list of district offices.

18 However, this gives the street
19 address, et cetera. That one does not. Now, here I
20 find the same -- oh, that's that one.

21 Does that have that same number on
22 it?

23 I don't know. I'm looking.

24 Q. It has a code number on it down there at
25 the bottom.

1 A. "Litho in U.S. 2-971-0562-10." I'm sorry.
2 I --

3 Q. What can you tell me about that document?
4 Did you have anything to do with the preparation of
5 that document?

6 A. It's the same man that -- that prepared
7 those.

8 Q. Who was that man who prepared these
9 documents?

10 A. Bill Grosse.

11 Q. Bill?

12 A. Grosse, G R O S S E.

13 Q. And how was he employed with Monsanto?

14 A. He was the advertising -- in charge of --
15 he was the advertising director, I guess you'd call
16 him, Bill Grosse, the advertising director.

17 Q. Now, was he the advertising director for
18 PCH's or for --

19 A. Everything.

20 Q. Everything.

21 A. In the -- in the organic division.

22 Q. Where would he get the information to go
23 into these booklets?

24 A. He would get that information from
25 excerpts. Color, clarity, and so forth, from the

1 specifications, for instance. It's -- it's called
2 colorless, and it's clear.

3 And then the black color and small
4 carbon particles, that indicates arcing. He would
5 have gotten that -- could have gotten that out of
6 that maintenance guide that we looked at earlier.

7 Dielectric strength is -- these are
8 subjects out of that maintenance guide.

9 Q. Well, would he come and talk to a person
10 like you to get information to go in there and make
11 sure it was accurate?

12 A. Yes, I would say so, that -- that he would
13 do this on the -- on the technical information.

14 Q. Do you --

15 A. It's certainly in line with what we had in
16 the maintenance guide.

17 Q. Do you recall whether Mr. Grosse did
18 consult with you about the information in that
19 particular piece of literature?

20 A. I don't recall it, specifically. This was
21 a long time ago. But I would assume that he did
22 because he is printing here, publishing, data that
23 looks like the data that -- that I had accumulated.

24 Q. There's a lot of technical information,
25 isn't there?

1 A. There's technical information. This is
2 what I'm getting at.

3 Q. And Mr. Grosse wouldn't know all that
4 technical information without the assistance of you,
5 would he?

6 A. That is correct.

7 Q. May I see that just a minute?

8 A. Either the assistance of me and discussion
9 and/or extraction from our literature.

10 Q. This little character that we see on the
11 front of the book -- can you kind of hold that up so
12 the camera can take a look at that?

13 A. (Witness complies)

14 Q. That little character there, was that one
15 of Mr. Grosse's inventions?

16 A. Yes, it was.

17 Q. Okay. And was that supposed to -- that
18 character was supposed to represent PCB's?

19 A. No.

20 Q. What did that --

21 A. That is supposed to draw attention, which I
22 believe you think it does do, do you?

23 Q. I don't know. You'll have to tell me.
24 Does it draw attention?

25 A. I think it speaks for itself.

1 Q. Okay. So, that was Mr. Grosse's --

2 A. That's Mr. Grosse.

3 Q. Okay. Now, in this book on "The Care and
4 Grooming of Askeral Transformer Fluid," there is a
5 section that talks about personal care and indicates
6 that transformer Askeral has been made and handled
7 and used for over 30 years without causing toxic or
8 other ill effects. Where would Mr. Grosse have
9 gotten the information like that?

10 A. He would have gotten that out of, probably,
11 our maintenance guide.

12 Q. Okay.

13 A. That's my guess.

14 Q. Let me look at this section with you
15 briefly, if I could. In the second sentence, where
16 he talks about personal care, he says that, "Askeral
17 can be handled in the same manner as insulating
18 mineral oil."

19 A. Oh, I can show you where this comes from.

20 Q. Where does that come from?

21 A. That comes from outside of Monsanto. This
22 comes from the transformer industry. And you will
23 see this same wording here in literature published
24 ex-U.S. in the -- some of these technical
25 organizations' publications.

1 Q. Okay. Now, here is --

2 A. That is, in my opinion, where that came
3 from. And that's where this was -- some of this was
4 extracted from.

5 Q. But this particular document is a Monsanto
6 publication, is it not?

7 A. Yes.

8 Q. And it's designed to go to various
9 customers of Monsanto?

10 A. Yes.

11 Q. And, in fact, it's designed to encourage
12 the use of Askeral transformers, is it not?

13 A. Right.

14 Q. And one of the things that's said to
15 encourage the use of Askeral transformers is that,
16 "Askeral can be handled in the same manner as
17 insulating mineral oil," correct?

18 A. Correct.

19 Q. And it indicates that, with regard to skin
20 contact, prolonged skin contact should be avoided
21 because there may be an allergic reaction to
22 Askeral, just like there can be with mineral oil,
23 correct?

24 A. Where does it say "like there can be
25 with" --

1 Q. "As with mineral oil" --

2 A. Oh, yes. Yes.

3 Q. -- "there may be some people allergic to
4 Askeral. So, prolonged skin contact should be
5 avoided where possible."

6 A. That's what it says, right.

7 Q. And I guess if it's not possible to avoid
8 prolonged skin contact, as long as you're not
9 allergic, you don't have to worry about it. Is it
10 what he's saying?

11 MR. CRAWFORD: Well, does it say
12 that?

13 THE WITNESS: It doesn't say that.

14 Q. (By Mr. Lacey) Well --

15 A. It doesn't say that. That's -- that's an
16 assumption, I suppose. He doesn't say that.

17 Q. Or does it indicate or clearly imply that
18 there are situations where prolonged contact with
19 Askeral cannot be avoided?

20 A. Well, I don't read this.

21 Q. Well, it says, "should be avoided where
22 possible." Does that indicate there are situations
23 where it's not possible to avoid prolonged skin
24 contact?

25 A. I can't think of any.

1 Q. I see. Okay.

2 A. I cannot think of any.

3 Q. All right. Now, with regard to this type
4 of information here, would Mr. Grosse have reviewed
5 these statements regarding what one should do in
6 contacting Askeral, with the medical department of
7 Monsanto?

8 A. I would say it should have been, or was.

9 Q. Either was or should have been?

10 A. Either was or should have been.

11 Q. Okay.

12 A. But I also am saying: Some of this
13 writing, some of this exact writing, comes from
14 literature outside of Monsanto. I'm not disagreeing
15 with this. I'm telling you the source.

16 Q. Do you agree with it?

17 A. I agree -- well, I'd like to read it over
18 again before getting pinned.

19 Q. Sure. Feel free.

20 MR. CRAWFORD: Well, what section are
21 you asking about? I mean --

22 MR. LACEY: The discussion.

23 THE WITNESS: Ordinary personal care.

24 MR. CRAWFORD: Oh, okay.

25 A. To my knowledge, that first sentence is --

1 to my knowledge, I agree with it. I have to agree
2 with it. I don't know of anything contrary.

3 Q. (By Mr. Lacey) The second sentence?

4 A. I would, more or less, agree with the
5 second sentence.

6 Q. When you say "more or less," what part
7 would you not want to agree with wholeheartedly?

8 A. I would not myself -- "as with mineral
9 oil." We didn't have mineral oil. I'm not in a
10 position to say "as with."

11 Q. So, you're not comfortable --

12 A. So, this is from ex-USA. I would say, as
13 far as I am concerned, this kind of -- of statement
14 should be run by our medical people --

15 Q. I understand.

16 A. -- for their assessment of this and not
17 through me.

18 Q. Okay. But my question right now is whether
19 you agree with the statement as a factual statement
20 that Askeral can be handled in the same manner as
21 insulating mineral oil?

22 MR. CRAWFORD: If you know.

23 A. IF I -- if I know. Now, as I'm telling
24 you, I think I know where this statement came from;
25 and I think we'll run into this later on --

1 Q. That's really not my question, though,
2 Mr. Benignus.

3 My simple question to you is whether
4 or not you agree with that statement: Yes or no?

5 A. I don't know "the exact same manner as
6 insulating mineral oil," because I don't handle --

7 Q. Okay.

8 A. -- mineral oil.

9 Q. Okay. And --

10 A. I don't want to make an assumption on this
11 thing.

12 Q. Okay. Now --

13 A. You know what I have to say on this
14 subject.

15 Q. Well, I'm trying to find out what you have
16 to say on the subject. That's -- that's what I'm
17 trying to find out.

18 And what I hear you saying is: You
19 would not make the statement that you can handle
20 PCB's just like mineral oil because you don't know
21 anything about mineral oil.

22 A. I can't say I don't know anything about
23 mineral oil, but I can say I'm not sufficiently
24 experienced or conversant with mineral oil to really
25 make this statement.

1 Q. Okay. Now, did --

2 A. I would say this requires -- should have --
3 the okay from our medical people. That's what I am
4 saying.

5 Q. Okay. And, so, if Mr. Grosse didn't have
6 the approval of the medical people to make that
7 statement on behalf of Monsanto, he should have?

8 A. Yes, I would say so.

9 Q. Okay. What -- one last question. About
10 what date was this "Care and Grooming of Askeral
11 Transformer Fluid," Document 2506 --

12 A. That fits in this time frame of the mid
13 1960's.

14 Q. Okay. Let me show you another document
15 called "When You Want Fire Safety Reliability,
16 Minimum Maintenance Specify Askeral Type
17 Transformers," Document 2522 through 2531.

18 A. Okay.

19 Q. Have you seen that document before?

20 A. I have seen this before. That fits -- ties
21 in with these same things.

22 Q. I see the -- you might hold that up. We've
23 got the same --

24 A. Pixie girl.

25 Q. -- pixie girl.

1 A. That's what I called it.

2 Q. Okay. Is that another one of Mr. Grosse's

3 productions?

4 A. It is.

5 Q. Okay. And it was produced in the mid

6 1960's, too?

7 A. Yes. It ties in with the other pixie girl.

8 Q. Okay. So, any time we see that, we know

9 we're looking for Mr. Grosse, or we're looking at

10 Mr. Grosse's work?

11 A. Yes.

12 Q. Okay. What was Mr. Grosse's background?

13 Was he a chemist or anything like that?

14 A. I don't know. I really don't know.

15 Q. Okay.

16 A. Could have been at one time.

17 Q. Let me come over and look at a portion --

18 A. He was a writer.

19 Q. Was he a pretty good writer?

20 A. He was a good writer, yes.

21 Q. Let me look at a section of this document

22 with you, on the Document No. 2532 page. And it's

23 entitled "An End to Misconceptions." Do you see

24 that?

25 A. Yes.

1 Q. And it indicates that there are some
2 engineers who have some misconceptions about Askeral
3 fluid, doesn't it?

4 A. This is the idea here, yes.

5 Q. Now, again --

6 A. They don't understand it --

7 Q. Yeah.

8 A. -- and, therefore, have misconceptions.

9 Q. Yes. Now, this is a document, again,
10 prepared by Monsanto and provided to customers to
11 encourage them to use Askeral transformers, correct?

12 A. Yes.

13 Q. Now, one of the misconceptions -- it starts
14 off by giving in bold type what the misconceptions
15 are, correct?

16 A. Yes.

17 Q. And the first misconception it says it's
18 going to deal with is the misconception that Askeral
19 fluids are poisonous; is that correct?

20 A. That's what it says.

21 Q. And it then goes on to say that Askeral
22 fluids have been manufactured, handled, and used
23 over 30 years without encountering toxic or ill
24 effects?

25 A. That's what we've been reading.

1 Q. Okay. And that means that they're -- this
2 document is telling Monsanto customers that nobody
3 has gotten sick enough to go to the doctor as a
4 result of working with PCB's, correct?

5 MR. CRAWFORD: Well, is that what it
6 says?

7 THE WITNESS: Well, it doesn't say
8 that in those words, no.

9 Q. (By Mr. Lacey) That's what it means
10 however, isn't it?

11 A. Well, it doesn't say that. But --

12 Q. Well, let me ask you about that. Didn't
13 you tell me before the lunch break that when a
14 document says there are no toxic or ill effects, it
15 means no one has gotten sick enough from PCB's to
16 have to go to the doctor?

17 A. Did I say that?

18 Q. Yes, you told me that, didn't you, before
19 the lunch break?

20 A. I would say so, if that's what -- what I
21 said. I don't recall exactly, but I'm not --

22 Q. Well, isn't that right, when you say --

23 A. If somebody is sick from it, they should go
24 see the doctor.

25 Q. And if somebody got sick from PCB's, that

1 would be a toxic or ill effect, wouldn't it?

2 A. Yes.

3 Q. Okay. So, what that's saying is people

4 haven't gotten sick from PCB's, correct?

5 A. That is what this is saying, yes.

6 Q. Okay. And that's said in order to overcome

7 this belief that some people have that PCB's or

8 Askeral fluids are poisonness, right?

9 A. This is correct.

10 Q. Okay. And it then goes on to indicate that

11 you can use Askeral fluids with the ordinary

12 personal precautions used with other inert

13 industrial materials, correct?

14 A. That's what it says.

15 Q. What's an "inert material"?

16 A. Not reactive.

17 Q. Okay. The next misconception that it

18 indicates it's going to deal with is the

19 misconception that Askeral transformers can explode,

20 correct?

21 A. That's what it says.

22 Q. Now, can Askeral transformers explode?

23 A. Yes.

24 Q. Okay. So, that misconception wasn't really

25 a misconception at all; that was correct, they could

1 explode, right?

2 A. I just told you they could --

3 Q. Okay.

4 A. -- explode as as a result of arc formed
5 gas.

6 Q. Okay. So, it's not a misconception that
7 Askeral transformers can explode, is it?

8 A. I'd have to read this.

9 Askeral transformers can explode.

10 Q. Right.

11 A. They can explode.

12 Q. Okay.

13 A. So, whether it is a misconception that --

14 Q. It's a little bit confusing, isn't it?

15 A. Yeah, I agree with you. And he is a
16 writer.

17 Q. Okay. And, yet, he's still writing on
18 behalf of Monsanto for people who might be using PCB
19 products made by Monsanto?

20 A. At this point in time.

21 Q. Yes.

22 A. Yes, he was writing about that.

23 Q. Is Mr. Grosse still with Monsanto; do you
24 know?

25 A. I don't know.

1 Q. How old a man was Mr. Grosse when you were
2 working with him?

3 A. I -- I cannot answer this. He was one of
4 these, to me, sort of an ageless person.

5 I'm sorry. I can't answer it.

6 Q. Well, did you think he was about your age,
7 younger, older?

8 A. He was younger than I.

9 Q. Okay. But you don't know how much?

10 A. No, I don't.

11 Q. Fine. Now, let me show you another
12 document, 1489 through 1493, and ask if you have
13 seen that document before.

14 A. It may have been in the list of things we
15 looked at. I have nothing to do with this.

16 Q. Okay. You've got nothing to do with that
17 at all?

18 A. I have nothing to do with this.

19 Q. And you have no idea what time frame it
20 might fit into; is that correct?

21 A. Well, I haven't looked at it.

22 Q. Well, okay. Go ahead and look at it. I
23 mean, if you can help us identify its location in
24 time, I would appreciate that help.

25 A. It says, "For the past ten years,

1 Monsanto's half century of experience has been
2 called on again."

3 I would think this is running into the
4 1960's. Now, that's a quick guess.

5 Q. That's based on information in the document
6 and your knowledge of Monsanto?

7 A. This is an estimation on my part. That's
8 the best I can do with this. I'm looking for
9 something that might tie something in.

10 I would say it may be running up into
11 the mid 50's to '60, something like this.

12 Q. Okay.

13 A. Now, that is merely an estimate.

14 Q. Fine. That's more help and knowledge than
15 we had before.

16 A. Well --

17 Q. Let me show you another document, 1504
18 through 1507, and ask if you can tell us anything
19 about that document and, in particular, what
20 period --

21 A. Do you want this back?

22 Q. You can just lay that down there, if you
23 wish.

24 A. See, this is, again, functional fluids.

25 Q. Are you able to help us at all with the

1 dating of that?

2 A. I'll try.

3 Well, here it says, "For 25 years
4 Monsanto has supplied the dielectric." Well,
5 Monsanto acquired Swann in '35. Then that 20 would
6 be -- it runs it up to what I've been talking about,
7 or about 1960. That's about as close as I can get
8 for you.

9 Q. Okay.

10 A. That is -- it's in the ballpark. Talks
11 about things that would be in that framework, as
12 best I can judge it.

13 Q. All right. Let me show you another
14 document called "Absorptive Refining of Askeral
15 Fluids," 2253 through 2264, and ask you if you can
16 help us date this document.

17 A. I would be looking for something like
18 1967. Can we find that?

19 MR. CRAWFORD: David, just so the
20 record is clear, since he didn't author these, he is
21 just giving you estimates -- and I think that's
22 pretty clear -- the best he can do. And -- and
23 there may be other exactries he can give you based
24 on the fact he didn't author them.

25 A. No, I didn't author this. I'm making a

1 guess.

2 I would put this into the time frame
3 after 1965 and certainly prior to 1970. So, I'm
4 hitting the mid to latter 1960's; and I'm pretty
5 sure I -- I feel comfortable with that.

6 Q. (By Mr. Lacey) Okay.

7 MR. CRAWFORD: As long as you feel
8 comfortable with it, Mr. Benignus; but just don't
9 guess on a document. If you feel comfortable --

10 THE WITNESS: All I can do is guess on
11 these things.

12 MR. CRAWFORD: Well, we don't --

13 THE WITNESS: I'm doing the best I
14 can, and I don't think I'm misleading anybody.

15 MR. CRAWFORD: Okay.

16 THE WITNESS: I'm not trying to,
17 and -- I don't know.

18 Q. (By Mr. Lacey) Well, that --

19 A. A week is going to make no difference. A
20 month will make no -- I don't know.

21 Does a year make much difference?
22 Don't pin me down to the year.

23 Q. This document you were just looking at,
24 "The Absorptive Refining of Askeral Fluids," is a
25 piece of advertising literature for dielectric

1 PCB's, correct?

2 A. Yes. That type of thing, yes, correct.

3 Q. And you're the --

4 A. And I --

5 Q. -- company representative on that?

6 A. Yes. And I'm answering your question.

7 And what did I tell you is the time on
8 this?

9 Q. 1965 to 1970; is that correct?

10 A. I put it in between there. I think it's
11 before 1970. Let me think some more.

12 Q. Okay.

13 A. I would tend to pin that on -- now, see,
14 he's getting me down to the exact year.

15 Let me pick '68.

16 Now, are you satisfied?

17 Q. I really wasn't dissatisfied at all with
18 your answers. Mr. Crawford is the one who's --
19 who's apparently not happy with them.

20 MR. CRAWFORD: Well, no. I just want
21 to be sure you're -- you're fairly comfortable with
22 the accuracy of that. That's all I'm saying. It's
23 just --

24 Q. (By Mr. Lacey) All we can do today --

25 A. I'm a bit uncomfortable now that I'm down

1 to 1968 per se.

2 Q. But you're comfortable between '65 and '70?

3 A. You better believe it.

4 Q. All right. All we're trying to do here is
5 get these documents dated. And if we can accomplish
6 that, why, we've accomplished something.

7 A. Because otherwise you're going to have a
8 lot more work.

9 Q. That's right. And I don't know who to --
10 who's going to help us do it.

11 A. Date this one the same way.

12 Q. Okay. Well, let me hand it to you so we'll
13 know which one is "this one."

14 We've got a document here called
15 "Inline Measurement of Electrical Properties" --

16 A. Right.

17 Q. -- "For Flowing Dielectrics," Document
18 O/FF-12, No. 1529 through 1536.

19 A. Yeah. I hope I find some sort of a code to
20 this. See, this has the exact same lettering as that
21 other one. And I'm reading 1068. Here again, I
22 don't know does that mean 1968. But I would be
23 comfortable with this document in the same time
24 frame as I gave you for that other document.

25 Q. Okay.

1 A. And -- so, mark it accordingly.

2 Where is the other one?

3 Oh, that, yes, those two. One is the
4 absorption equipment, and the other one is the way
5 you measure what that absorption equipment has
6 accomplished. So, the two go hand in hand.

7 Q. Okay. Let me show you another document
8 called "Toxicology and Safe Handling of Monsanto
9 Aerclor Chlorinated Diphenyl," Document 18731
10 through 18737, and ask if you can give me a date on
11 that document.

12 Have you ever seen that one before?

13 A. I -- I recognize things in here that we
14 printed before. But whether I saw this, I'm trying
15 to --

16 Q. I've looked for --

17 A. I would -- I'd almost say "no."

18 Q. So, that one may be after your retirement?

19 A. I would have to say "no."

20 Q. It's not after your retirement?

21 A. I recognize things in there --

22 Q. Okay.

23 A. -- but I have not seen this.

24 Q. So, you don't have any idea to help us out
25 on that one?

1 A. I cannot pinpoint that one.

2 Q. Okay.

3 Q. Can you tell me what "Pydraul" was?

4 A. "Pydraul" was a trade name assigned to
5 fluids for use with, say, things like metal die
6 casting machines. It's a hydraulic fluid.

7 "Pydraul" is a hydraulic fluid.

8 Q. Did it contain PCB's?

9 A. Not all Pydraul contained PCB's. Some
10 Pydraul may have contained PCB.

11 Q. And you really don't know for sure one way
12 or the other about which ones did and which ones
13 didn't?

14 A. No, I wouldn't -- I was not in that area.

15 Q. Did -- when you were working in the
16 inorganic area, did you have anything to do with the
17 PCB's that went into things like hydraulic fluids?

18 A. PCB was used at that point in time as a
19 hydraulic fluid; yes, it was.

20 Q. While you were in that area?

21 A. This is right.

22 Q. Did you have anything to do with the PCB's
23 used as hydraulic fluid while you were in the
24 inorganic area?

25 A. Not to select -- not to specify, but merely

1 to acknowledge that PCB fluid was so in use. That
2 was the extent of it.

3 Q. When you say "acknowledge that it was so in
4 use," you mean you could --

5 A. I knew of it.

6 Q. -- just tell us that happened?

7 A. I knew of it.

8 Q. Okay. Did you ever do any work on
9 literature for the advertising of the Pydraul
10 fluids?

11 A. No.

12 Q. Who in that area was responsible for that?

13 A. Well, the product manager of that area
14 would have been George --

15 Do you want the job position? What --
16 what are you asking for?

17 Q. Well, hopefully somebody you can tell us
18 about who might be able to do for us with regard to
19 the hydraulic fluid materials what you've done for
20 us with regard to the dielectric -- dielectric
21 materials, help us identify documents and the dates
22 on which they were published.

23 A. This, now, different than in my case. Here
24 you're talking to one individual, which simplifies
25 things. You're now getting into an area where there

1 were several individuals involved. I'm talking
2 about an organization. And perhaps this question
3 that you raised with me had better be asked more
4 specifically from someone in that area rather than
5 myself.

6 Q. So, you can't even --

7 A. If you understand what I'm trying to tell
8 you.

9 Q. Yeah. I'm just trying to find out if you
10 can even identify somebody that was in that area who
11 might be able to help us out, or we're back to
12 looking at the phone book to try to find somebody to
13 talk to.

14 A. I don't know who to name. I -- I am -- I
15 know people in that area.

16 Q. Can you tell me some of the people that
17 were in that area?

18 A. George Buchanan was the product manager.
19 Now, he's retired, George Buchanan.

20 Q. Do you know where Mr. Buchanan lives now?

21 A. Yeah.

22 Q. Where does he live?

23 A. He lives in -- see, now you're going to say
24 Paul Benignus gave you that name.

25 MR. CRAWFORD: Go ahead. He's

1 entitled to it.

2 THE WITNESS: I think he is entitled
3 to this.

4 MR. CRAWFORD: Well, he is.

5 THE WITNESS: I really do.

6 A. He lives in Green Valley, Arizona.

7 THE WITNESS: Can you leave your
8 fingers still a minute?

9 Q. (By Mr. Lacey) She's got to keep her
10 fingers going. That's her obligation.

11 You go ahead and tell us. It isn't
12 going to hurt anything if her fingers are going.

13 MR. CRAWFORD: Well -- well, just
14 answer -- just answer his question because we've got
15 a lot of --

16 A. You asked where does he live. Green
17 Valley, Arizona.

18 MR. CRAWFORD: Okay. That's good.

19 Q. (By Mr. Lacey) Do you know whereabouts in
20 Green Valley?

21 A. (No response)

22 Q. I thought maybe that's what you were going
23 to try to tell us, if you happened to know.

24 A. Oh, excuse me. You think Green Valley is a
25 river valley. There are no great rivers out there

1 except the dry Colorado River.

2 Q. That's -- that's the name of a town in
3 Arizona?

4 A. That's the name of a town.

5 Q. Okay.

6 A. Green Valley, Arizona.

7 Q. All right.

8 A. You can go from there.

9 Q. Okay. Can you tell me what "Therminol" is?

10 A. Yes. Therminol relates to this same group
11 that we're talking about, the Pydrauls; the
12 Therminols; Skydraul, which isn't PCB. And
13 "Therminol" is a name, as it implies, heat, heat
14 transfer fluid.

15 Q. Who could help us date these documents that
16 we have that relate to Therminol? Would
17 Mr. Buchanan be the person there, too?

18 A. (Witness nods head)

19 Q. You need to answer verbally.

20 A. Yes.

21 Q. Okay.

22 A. He should be.

23 Q. All right. Now, what about -- we have some
24 documents here that relate to coatings and
25 plasticizers and things like that.

1 Who would be a person who could help
2 us with regard to those documents?

3 A. I have thought of this, that you would ask
4 this, also. I've been trying to think. And if I
5 knew more specifically, I would tell you, believe
6 me.

7 Q. Certainly.

8 A. I just don't.

9 Q. That would not be in Mr. Buchanan's area?

10 A. No, that would not have been at this time
11 in his area; this is correct.

12 Q. And you don't have any idea of who might
13 have been involved with that particular area?

14 A. I really don't know who to nominate.

15 Q. Okay. Let me -- I'm trying to get through
16 all of these various bulletins we've got and make
17 sure we've got everything covered here.

18 A. Isn't it awful?

19 Q. There's a lot of them, aren't there? A
20 fair amount of --

21 A. It's -- it's a lot of --

22 Q. We had a fair amount of literature that
23 Monsanto provided to various customers dealing with
24 PCB's.

25 A. Yes, this is correct.

1 Q. I've got some more here that -- let me
2 see. I'm not quite sure how these fit in.

3 There's a document here called the
4 "Aroclor Polychlorinated Polyphenyls," Technical
5 Bulletin O-FF/1, Document SCM 018626 through 18651.

6 Let me ask you to take a look at that
7 and see if you can provide me any information about
8 that document.

9 A. Now, incidentally, this has that same --
10 this thing, which we thought might be an attachment
11 earlier --

12 Q. Right.

13 A. -- and were somewhat confused about,
14 whether somebody tacked it on there.

15 This, I would say -- here, this says,
16 "For more information, additional literature,
17 Askeral Inspection and Maintenance Guide," which we
18 have already time framed between 1962, at the start
19 and -- I don't know when the last revision was
20 made. This is -- would have to be put into the
21 framework of the 1960's.

22 Q. Okay.

23 A. That is --

24 Q. This has, I note, in it tables like we saw
25 before in that --

1 A. It does.

2 Q. -- P-115 and OP-115.

3 A. Yes.

4 Q. Would that have been a document with the
5 tables in it that you would have reviewed for
6 accuracy before it went out?

7 A. These tables? At some point in time --
8 whether for this particular issue, I do not know.

9 Q. I see.

10 A. See, every time a -- one of these things
11 issued, I wasn't sitting there waiting for it.

12 Q. I understand.

13 A. I would hope so.

14 Q. That would almost be a full-time job, to
15 sit there and wait for all these, wouldn't it?

16 A. It would.

17 Q. Let me show you another document which
18 appears to be just another copy of that -- but I
19 want you to look and make sure -- also labeled the
20 "Aerclor Polychlorinated Polyphenyls," Technical
21 Bulletin O-FF/1, 132 through 157, and ask if that's
22 simply a copy of the other document you just looked
23 at.

24 A. It appears to me to be exactly that. Now,
25 it has this number back here. Have you looked at

1 that number?

2 Q. Which number is that?

3 A. This number.

4 Q. Where it says "0466-6"?

5 A. Yeah.

6 Q. Let me see the --

7 A. I think that's the same as that.

8 Q. Let me see if that's the same number on the

9 other one.

10 MR. CRAWFORD: (Indicating)

11 Q. (By Mr. Lacey) Does it have -- it seems to

12 be even the same little number there.

13 A. I think it's just another --

14 Q. Another copy of the same one?

15 A. -- copy.

16 I think so.

17 Q. Let me show you another document, also

18 labeled the "Aerclor Polychlorinated Polyphenyls."

19 Here, instead of giving the -- it's got the same

20 title; but instead of giving a list of the series,

21 et cetera, it just says "Dielectric for Capacitors

22 and Transformers." Then it says Technical Bulliten

23 O/FF/R, which would indicate it is a revision?

24 A. That's a revision of something.

25 Q. This is Document 158 through 179, and I

1 would ask you if that appears to be a revision of
2 the two documents we just previously discussed?

3 MR. CRAWFORD: Here.

4 A. I have evidence here that this would, no
5 doubt, put this into the time frame of this 11-71
6 that I see back here.

7 Q. (By Mr. Lacey) Okay.

8 MR. CRAWFORD: Well, Mr. Benignus,
9 you -- you're basing that strictly on this page that
10 has the district office -- sales office divisions;
11 is that correct?

12 THE WITNESS: Well, no. No, it
13 isn't. I'm looking at this number, which I'm not
14 sure I know what it means. But I'm looking at that
15 number, but I'm looking at something else I saw.

16 MR. CRAWFORD: Okay.

17 THE WITNESS: I'm only trying to date
18 this.

19 Q. (By Mr. Lacey) That's really what I've
20 asked you to do.

21 And you would date it in the '71 time
22 frame?

23 A. Yes. Do you want to know why?

24 Q. Sure.

25 A. Of course, you would.

1 Q. I've been trying to ask all those questions
2 today.

3 A. Let me read. It mentions Bill Pappageorge,
4 his address, 800 North Lindburgh, St. Louis,
5 Missouri, Area Code -- I mean ZIP Code 63116.
6 Okay.

7 Q. So --

8 A. Pappageorge arrived.

9 Q. Yes. Now, that is a revision of the
10 previous document, is it not?

11 A. Of this?

12 Q. Yes.

13 A. (No response)

14 Q. You'll note the number O-FF on there. Look
15 at the front number. That appears to be a revision
16 of that prior document; is that correct?

17 A. Excuse -- excuse me?

18 Q. Yes. Let me -- I want to make sure --

19 A. Oh, I see what you're saying.

20 That's the way it looks to me.

21 Q. And the reason this one just talks about
22 dielectrics for capacitors and transformers where
23 the prior versions of the same titled document
24 talked about all these other uses is because
25 Monsanto has now stopped selling PCB's for any use

1 except dielectric; isn't that correct?

2 A. Yes, sir.

3 Q. Okay.

4 A. Correct.

5 Q. Now, let me have each one of those back for
6 a moment, if I could.

7 Did you have any involvement with
8 either of these documents, to your knowledge?

9 A. No, I did not. I've only been able to time
10 frame them for you.

11 Q. Okay. Now, each one of these documents has
12 in it a section on dermatology and toxicology and
13 safe handling. Is that something that would, again,
14 go back to the medical department for explanation?

15 A. It should.

16 Q. Okay. They would be the people to talk to
17 about that?

18 A. Yes.

19 Q. All right.

20 A. And you've got that timed correctly.

21 Q. Okay. And we would still be --

22 A. Sure have.

23 Q. -- talking about Dr. Emmet Kelly --

24 A. Yes.

25 Q. -- as the person in the medical department?

1 A. Yes.

2 Q. Was he there all the way up until the time
3 that you retired?

4 A. Yes.

5 Q. Okay. So, throughout --

6 A. Except during the war years, I happen to
7 know.

8 Q. What was he doing during the war years?

9 A. Well, he's a medical doctor.

10 Q. In the service?

11 A. Yes.

12 Q. Who was performing the functions as medical
13 director for Monsanto during the World War II years?

14 A. I do not know. I do not know. I can't
15 answer that.

16 Q. Okay. Let me turn your attention to some
17 other documents I think will be easier maybe to
18 understand; at least they are for me, and I hope
19 they will be for you.

20 I want to show you a document called
21 the "Reference Bulletin on Aroclor Fluids for the
22 Transformer Industry," dated April 13th, 1954,
23 Document 1783 through 1793.

24 Have you seen that document before?

25 A. Yes, I've seen that. I saw that last

1 night, late last night.

2 Q. Who wrote that document?

3 A. I did. This is dated 1954.

4 Q. Okay. And -- and what was the purpose --

5 A. It's dated.

6 Q. Yes. What's the exact --

7 A. It's got my initial, and you're asking me?

8 Q. What's the exact date there on it?

9 I don't have a copy in front of me. I
10 gave my copy to you.

11 A. The exact date is 4-13-54.

12 Q. That would be April 13th, 1954?

13 A. Correct.

14 Q. Now, what was your purpose in writing that
15 document?

16 A. This is an in-house, one might say, within
17 company, piece of information, brochure, that was
18 aimed at telling people in our sales department that
19 there are these different materials that they may
20 hear. This is the essential part of this thing.

21 And you'll see here it identifies a
22 whole list of compounds. It's nice that you have
23 this, isn't it? It does that accurately and gives
24 their composition.

25 Q. This was written as a reference book for

1 other Monsanto people, so to speak?

2 A. Yes, that's all it is.

3 And it lists trade names by various
4 transformer manufacturers, what their given trade
5 name is. Some of these are capacitor -- well, it
6 does say "capacitor" here. Others says
7 "transformer." So that the salesmen will have heard
8 of this, that he's not completely oblivious to
9 this.

10 It's not intended for anything
11 external.

12 Q. But it's information so he can answer
13 questions that do come from customers, correct?

14 A. I wouldn't -- all right. If you want -- I
15 don't know whether we expect this.

16 Q. Who asked you to write that?

17 A. Who asked me to write this?

18 Q. Yes.

19 A. In 1954. This could have been a man in the
20 position that I referred to who was -- let's say the
21 project -- the product manager might have asked
22 this, might have asked this.

23 Q. Do you know why you were selected to do it?

24 A. I was about the most logical one to
25 identify these -- this whole list of product names

1 that -- Pyranol -- that's the G.E. names. I
2 would -- I would be the logical place to go for
3 this.

4 Q. You had more knowledge about these sorts of
5 things --

6 A. Yeah.

7 Q. -- than anybody else --

8 A. Yeah.

9 Q. -- in Monsanto?

10 A. Yeah.

11 Q. Let me --

12 A. That would -- that would have been it. And
13 I wrote it as an in-house thing.

14 Q. It explains the basic things about how
15 transformers work and what they're used for,
16 correct?

17 A. I would suppose, yes. Just general
18 information. This isn't training anybody.

19 Q. Well, would this be the sort of document
20 that a salesman might keep handy so if he has a
21 question come in over the phone, he could flip to it
22 and be able to find the necessary information?

23 A. No, I don't think so. No. Unless if he is
24 getting an inquiry from someone, like, for instance,
25 G.E. Pyranol 1499. And this is a name -- this is

1 the trade name, common -- in common use at G.E. To
2 us -- to him, it would be Aroclor -- 1248, was it?
3 Look and see.

4 Q. Okay. Let's see.

5 A. I can't remember. Pyranol 1499?

6 Q. See if it lists 14.

7 A. It would be close to it.

8 Q. 1242, it says here.

9 A. Well, I was weighing: Is it 1242 or 1248?

10 Q. Says here it's 1242.

11 A. Yes, this is correct.

12 See, even now, I can't remember that;
13 and how could a salesman? That's its purpose.

14 Q. Okay. Now, this document described the
15 different types of transformers that could be used,
16 did it not? It compared dry transformers to
17 oil-filled to PCB-filled transformers?

18 A. I don't remember that it does, but if you
19 say it's -- that's written in there.

20 Q. Let me -- let me look at it with you for a
21 minute.

22 A. All right.

23 Q. Let me just --

24 A. Well, this is the types of insulation.

25 Q. Yeah. It -- and it goes through to

1 actually, in the process of discussing things, talk
2 about the sales and application picture for PCB
3 transformers or Askeral transformers --

4 A. Uh-huh.

5 Q. -- correct?

6 A. Uh-huh.

7 Q. And talks about the different
8 characteristics of how transformers are selected;
9 talks about dry-type units?

10 A. Dry -- yes, where one would have an open
11 dry -- this shows a the different kinds of
12 transformers, open dry.

13 Q. Right. Analyzes the various
14 characteristics of transformers that could be used
15 indoors?

16 A. Uh-huh.

17 Q. Makes comparisons between liquid and dry
18 transformers and all sorts of different
19 characteristics, correct?

20 A. Yes.

21 Q. Talks about even how much they -- how much
22 noise they give off and how much they vibrate?

23 A. Yeah.

24 Q. Explains the developments that are taking
25 place in dry transformers that may improve their

1 characteristics, correct?

2 A. Well, you're reading -- I go along with
3 what you're saying on that. Yeah, improvements in
4 continence and things --

5 Q. Talks about the development of this Class B
6 insulation material?

7 A. Yes.

8 Q. And I guess what I'm trying to figure out
9 here is whether the purpose of all of that was to
10 allow a salesman --

11 A. No. Now that we've gone through this, no.

12 Q. Well, let me finish my question.

13 A. All right.

14 Q. I'm trying to find out whether the purpose
15 of this was to sufficiently educate Monsanto
16 salesmen so that they would know what the potential
17 benefits of Askeral transformers are vis-a-vis
18 competition like mineral-oil-filled transformers or
19 dry-type transformers?

20 A. No. No.

21 Q. Well, why does it give the salesman so much
22 information about the dry transformers --

23 A. Excuse me. When I said "to the salesman,"
24 I was looking at this list of product names.

25 Now, that would be helpful to a

1 salesman calling on one of these companies, say the
2 purchasing agent. Whereas to the salesman it's
3 Aroclor 1242 and here he runs into Pyranol 1499 that
4 he never heard of before, this correlates that. Now
5 that's what I looked at.

6 That would be of interest. This is an
7 in-house thing. Above and beyond that, anything I
8 said is extraneous.

9 Q. Well, why did you write all the rest of
10 this stuff about dry transformers and benefits,
11 vibration, noise, insulating materials, et cetera?

12 A. Well, I knew about this and this was
13 extracted from the literature and so forth and I
14 just put it together maybe --

15 Q. But -- but for what purpose?

16 A. We weren't making transformers; we weren't
17 designing transformers; we were not selling
18 transformers.

19 Q. You did it just to be doing it?

20 A. That's about -- as I told you -- as I see
21 this, the most significant part of that is to list
22 the product nomenclature. That -- that is it.

23 Maybe you'll say I didn't have much
24 more to do. I don't know.

25 Q. Well, I -- I guess I'm just looking here.

1 A. I'm passing along things that I knew and
2 had read about transformers and passed it into the
3 product group.

4 We were selling dielectrics to people
5 who built -- designed and built transformers, and I
6 passed this -- it's a general information bulletin.
7 This is what it is. There's no specific goal,
8 purpose, and so forth. It is a matter of general
9 information.

10 Q. Okay.

11 A. That's it.

12 Q. For salesmen?

13 A. No. Now that I've gone through this thing,
14 as I told you, for salesmen, I can see that this
15 product nomenclature could be of interest. But that
16 is of interest, also, to the clerk who fills orders
17 that these names can come in. It's of interest to
18 people in this product group. It's general
19 information.

20 Q. Well, the document is approximately 11
21 pages long. And the list of nomenclature, what the
22 G.E. name is versus the Monsanto name and so forth,
23 takes the -- a page and a half.

24 A. Right.

25 Q. What was the other nine and a half pages

1 for?

2 A. General information.

3 Q. For anybody's benefit?

4 A. For anybody.

5 Q. And who would it be within Monsanto who
6 would have one of these reference bulletins for
7 their benefit?

8 A. I would say the product manager and people
9 in -- in -- associated with him. That's its
10 purpose.

11 Q. And would that include the salespeople,
12 too, or not?

13 A. No. No.

14 Q. Okay. Let me show you another document
15 titled "The Proper Handling of Aroclor and their
16 mixtures in the Electrical Industry," Document 1967
17 through 2051.

18 A. I'm very familiar with that.

19 Q. Okay. How are you familiar with that?

20 A. Has my name on it.

21 Q. Okay. Did you write it?

22 A. I wrote it.

23 Q. And what date did you write it?

24 A. 12-1-54.

25 Q. December 1st, 1954?

1 A. Correct.

2 Q. You wrote that in the same year that you
3 wrote this reference bulletin on Aroclor fluids,
4 right?

5 A. Okay.

6 Q. Is that accurate?

7 A. Well, it says so, doesn't it?

8 Q. I believe --

9 A. Yes.

10 Q. -- it does.

11 A. Yes.

12 Q. Now, what was the purpose of writing this
13 document on the proper handling of Aroclors and
14 their mixtures in the Electrical Industry?

15 A. The purpose of this was to inform our
16 customers of the specifications of all these -- call
17 them "PCB's." And you'll note in here all the test
18 procedures, as used at -- and documented at the
19 American Standards -- the ASTM.

20 So, it gives all of that in -- in
21 great detail. For instance, here it gives great
22 detail of the procedure that is used in our own
23 laboratories, and it gives detail of the procedures
24 documented at ASTM out in the industry. And it goes
25 into this detail, also, on sampling methods. Then

1 it goes into such things as unloading of tank cars.

2 Now, I remember this. It was sort of
3 embarrassing. A man would come and buy his first
4 tank car, and it would be shipped. And he would
5 have gone to the effort of building an unloading
6 dock to receive this thing. And he built this
7 dock -- would have built it to unload from the
8 bottom, where tank cars usually do unload.

9 Q. And wouldn't even know enough to know how
10 to unload the car?

11 A. Wouldn't know how to unload the car. Ours
12 unload through the top. Things like this. They
13 were intended, in detail, for our customers --

14 Q. Okay. So --

15 A. -- of which there weren't many.

16 Q. Okay. So, you'd provide a document like
17 that to General Electric and a document to
18 Westinghouse and a document to Allis-Chalmers --

19 A. Exactly.

20 Q. -- and those sorts of people?

21 A. Exactly.

22 Q. Let me look at that document with you for a
23 little bit just to go over the sorts of things that
24 are in it. It's got in here a index or table of
25 contents --

1 A. Yes.

2 Q. -- at the first, doesn't it?

3 A. Uh-huh.

4 Q. And there it deals with a lot of things
5 about what it's going to cover. For example, it has
6 a chapter on unloading tank cars?

7 A. Right. I saw that here somewhere, the tank
8 car unloading. All right.

9 Q. It has a chapter on storage tanks?

10 A. Right. We disclosed the kind of storage
11 tanks we used.

12 Q. Has a chapter on gas -- gasketing and pump
13 packing?

14 A. Packing, right.

15 Q. Has an entire chapter on how to do sample?

16 A. Right.

17 Q. An entire chapter on how to do laboratory
18 analysis?

19 A. Correct.

20 Q. A chapter on the actual test procedures?

21 A. Right.

22 Q. A chapter on typical properties?

23 A. Correct.

24 Q. A chapter on earth treatment of the
25 Aroclors and their mixtures?

1 A. Right.

2 Q. And a chapter on dermatology and
3 toxicology?

4 A. Yes.

5 Q. Okay. Now, did you write each one of these
6 chapters yourself; or did you get any help on this
7 from somebody else?

8 A. Most of it, I wrote by myself.

9 Well, no. Wait a minute. I would
10 have to find out, "Now, what is it the design and
11 the construction of the storage tank?" I wouldn't
12 know this offhand.

13 Q. Okay.

14 A. I had to go elsewhere to get this. You can
15 go down the line. I was in an office. I
16 accumulated this information from other people, to
17 answer your question.

18 Q. Okay. The chapter on tank cars, for
19 example --

20 A. Uh-huh.

21 Q. -- starts off and it's got some very
22 specific directions on what to do, doesn't it?

23 A. I would think so.

24 Q. I mean, for example, it explains there are
25 either two or three --

1 A. Yes.

2 Q. -- connections on the top of the car --

3 A. Right.

4 Q. -- and exactly what size they are?

5 A. It's very detailed, right.

6 Q. Exactly what pressures to use?

7 A. And that information was given to me from
8 our plant.

9 Q. Right. Even -- even goes to the point of
10 explaining that the car has got to be level and the
11 brakes have got to be set before you can unload it?

12 A. We know this.

13 Q. Okay. So, it's very detailed with regard
14 to that?

15 A. It's very detailed.

16 Q. All right. And that same sort of detail
17 follows through that whole chapter, basically a
18 step-by-step how to do it?

19 A. Right. And that -- I obtained from our
20 plant.

21 Q. Right. When we come to storage tanks --

22 A. Same thing.

23 Q. Same thing, very detailed description of
24 storage tanks, exactly how they should be built,
25 exactly what materials to use and everything,

1 correct?

2 A. Right.

3 Q. Talks -- even has drawings on how to do it
4 and the exact sizes of the nozzles, doesn't it?

5 A. It sure does.

6 Q. Okay. When we get to the chapter on
7 gasketing and pump packing, it describes --

8 A. A specific.

9 Q. -- specific types of connections, gives the
10 part number and the company you can get it from?

11 A. That's the purpose of this.

12 Q. Okay. The chapter on the sampling methods,
13 again, is very specific on how you do it, is it not?

14 A. That's correct.

15 Q. Explains what you can do, the particular
16 type of sample bottle, how -- what size it is, what
17 color it is and everything, doesn't it?

18 A. That's correct.

19 Q. Okay. When you start talking about
20 laboratory analysis, again, you have a great deal of
21 detail on exactly what to do, don't you?

22 A. This is right.

23 Q. Explains the size bottle to use and what
24 flask and what beaker and exactly what methods are
25 to be used, correct?

1 A. Right. And that was obtained from our
2 laboratories.

3 Q. Right. Then it talks about the actual test
4 procedures. These are specific procedures to make
5 sure that the electrical properties have been
6 properly maintained?

7 A. This is correct.

8 Q. Okay. And it has great detail on those
9 test procedures; is that correct?

10 A. That's correct.

11 Q. Even has in here some points, in capital
12 letters, "Caution," you know, "Don't touch the
13 electrodes with your hands," that sort of thing?

14 A. That would contaminate them.

15 Q. Okay. Gives the details on the specific
16 apparatus to be used, like a certain oscilloscope,
17 particular model number and everything, right?

18 A. (No response)

19 Q. Is that correct?

20 A. Yes, that's correct.

21 Q. Talks about specific safety in operating
22 controls on certain equipment that are used,
23 explains exactly the order to go and which button to
24 push and when, correct?

25 A. That's in the laboratory, yes.

1 Q. Very detailed on that?

2 A. Yes.

3 MR. CRAWFORD: Say, David, about ready
4 for a break?

5 MR. LACEY: Why don't you let me
6 finish --

7 MR. CRAWFORD: All right.

8 MR. LACEY: -- this document right
9 here?

10 Q. (By Mr. Lacey) In fact, in talking about
11 the test procedures here on Page 47, Document
12 No. 2017, it expresses you should -- "Danger. Make
13 sure to check knob is in the check position
14 otherwise painful shock will result"?

15 A. That's right.

16 Q. Just down to the point of exactly where to
17 set the particular controls at any point in the
18 testing, right?

19 A. That's correct.

20 THE REPORTER: "Twenty" or
21 "twenty-seven" seventeen?

22 MR. LACEY: 2017.

23 Q. (By Mr. Lacey) Talks at another point, on
24 Page 48, No. 2018, another caution; talks about the
25 500 volt D.C. charge and the shock hazard that

1 exists in handling the apparatus, correct?

2 A. That's correct.

3 Q. The next page, it observes again,
4 underlined, the possibility of painful shock,
5 doesn't it?

6 A. If you get a jolt of 500 volts --

7 Q. You'll know it, won't you?

8 A. -- you'll know it.

9 Q. Okay. In fact, that chapter on the test
10 procedures goes on and on and on, doesn't it? It's
11 a pretty long chapter?

12 A. This was the area in which I operated.
13 I've been trying to get that across to you.

14 Q. Okay. Then you had --

15 A. Now you're learning.

16 Q. Then you had a chapter on the typical
17 properties of Aroclors, correct?

18 A. Yes.

19 Q. And you gave the --

20 A. Yes.

21 Q. -- the trade names and what they were made
22 up of?

23 A. And the specifications.

24 Q. And you have specifications for each
25 Aroclor?

1 A. That's correct.

2 Q. All right. And that has all sorts of
3 detail in there, all the constants that go with it?

4 A. And this is the same data that is
5 documented at the American Society for Testing and
6 Materials and, also, internationally.

7 Q. Then we have the chapter on earth
8 treatment --

9 A. Yes.

10 Q. -- and it describes specifically how you
11 could filter Aroclors through special earth to take
12 out impurities, correct?

13 A. This is correct.

14 Q. Defines the specific places you could get
15 the materials and all of what it takes to order it
16 and do it, correct?

17 A. This is correct.

18 Q. Okay. Then we come to the chapter on
19 dermatology and toxicology. Now, did you write that
20 chapter?

21 A. Well, this was given to me from the medical
22 department.

23 Q. I see.

24 A. I did not -- I don't know what you mean by
25 "write it."

1 Did I copy it down; did I formulate
2 this; did I decide what to put here?

3 No.

4 Q. Okay.

5 A. I received this from the medical
6 department. I know exactly what is in here, and
7 this is where it came from.

8 Q. Okay. Well, let me stop --

9 A. And -- oh, I'm sorry.

10 Q. I'm sorry. Go ahead. You can tell me
11 about the medical.

12 A. Well --

13 Q. I've got --

14 A. Well, here again, in this area, talk to our
15 medical people.

16 Q. Okay.

17 A. I -- I gave what I received.

18 Q. Now, in the other chapters, for example,
19 how to unload a tank car, you got that from your
20 plant people, correct?

21 A. Yes, I did.

22 Q. And it gave step by step what to do just
23 the way your plant people did it, correct?

24 A. This is correct.

25 Q. And on the storage tanks, you got the

1 information there from your plant people and gave
2 step by step just how to handle a storage tank,
3 correct?

4 A. This is right.

5 Q. And on the section about laboratory
6 procedures, that came step by step from --

7 A. Well, we went through the whole thing.

8 Q. Yes.

9 A. We're right on the entire thing there --

10 Q. Yes.

11 A. -- that you're talking about.

12 Q. Well, let me ask my question.

13 Now, on the laboratory procedures, you
14 went step by step just the way Monsanto did it in
15 the laboratory, correct?

16 A. And as it was done by others in the field,
17 industry, yes.

18 Q. Okay. The same thing with filtering the
19 Aroclors through the earth, step by step just like
20 Monsanto did it, correct?

21 A. Yes. We already said all these things.

22 Q. I want to make sure that each set of
23 directions were step by step just like Monsanto did
24 it themselves, correct?

25 A. Yes. Yes.

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1 Q. Now --

2 A. Okay.

3 Q. -- my question to you is: On the
4 dermatology and toxicology and safe handling, did
5 you set out there step by step in detail exactly how
6 PCB's were handled in Monsanto's plants?

7 A. No. I went in accordance with what was
8 given to me by the medical department.

9 Q. So, that's the only portion of this book
10 that doesn't give the step by step handling
11 procedures the same way Monsanto did it in their
12 plants; isn't that right?

13 A. Oh, it doesn't do this. This -- I have to
14 agree. I agree with you on this.

15 Q. And every other portion of the book does
16 give the step by steps, doesn't it?

17 A. Yes.

18 Q. And the reason you put that in there is
19 because that's what the medical department gave you
20 to put in there?

21 A. That's where it came from.

22 Q. And they're the ones --

23 A. Dr. Schwartz' skin-patch test.

24 Q. Did Dr. Schwartz give that to you?

25 A. No.

1 Q. Who gave it to you?

2 A. That came from the medical department.

3 Q. Dr. Kelly?

4 A. Well, it came through him, let me say.

5 That's where it came from.

6 Q. From Dr. Kelly?

7 A. From the medical department.

8 Q. Well, do you know whether it came from
9 Dr. Kelly or -- or one of his people?

10 A. Oh, I don't know. I -- I can't answer
11 this. It came from that area.

12 Q. Who was working with Dr. Kelly in the
13 medical department back in 1954?

14 A. I think Elmer Wheeler was there.

15 Q. Were they aware of the type of book you
16 were writing for everything else and what this was
17 going to go into?

18 A. What this information here would be
19 included in?

20 Q. Yes.

21 A. They should have been.

22 Q. You made them aware of that?

23 A. It was certainly -- to my knowledge, yes.

24 Q. Okay.

25 A. That was the operation procedure, yes.

1 Q. And after you got that back and put the
2 rest of the book together, it was finally done and
3 then provided to customers, correct?

4 A. This is correct.

5 Q. Okay. I believe Mr. Crawford indicates
6 it's about time to take a break; so, why don't we
7 stop right here?

8 THE VIDEOGRAPHER: We are now going
9 off the record. The time is 2:36 p.m.

10 (Short Recess)

11 THE VIDEOGRAPHER: We are now back on
12 the record. The time is 2:59 p.m.

13 Q. (By Mr. Lacey) Mr. Benignus, let me show
14 you document 2052 through 2138 and ask you if this
15 isn't an updated version of your work on the proper
16 handling of Aroclors and their mixtures in the
17 Electrical Industry.

18 A. That is.

19 Q. And this work follows the format of the
20 original in that it has all of the detailed
21 information in each chapter on the specific Monsanto
22 procedures for doing everything with the exception
23 of the -- not having the specific detailed
24 procedures on exactly how Monsanto handles PCB's in
25 their plant units; is that correct?

1 A. That's the way it reads.

2 Q. Okay. Then, let me show you -- by the way,

3 the -- what was the date of that update?

4 A. '56.

5 Q. Okay. And why did you produce an updated

6 version in 1956?

7 A. We ran out.

8 Q. Okay.

9 A. That's all.

10 Q. You sold out the first printing?

11 A. It went. They were intended for a handful

12 of customers; and where they all went, I don't know.

13 Q. Okay. Now, let me show you another

14 document, 2139 through 2252, and ask you if this is

15 a 1960 update of your previous work entitled "The

16 Proper Handling of Aroclors and Their Mixtures in

17 the Electrical Industry."

18 A. Yes, it is.

19 Q. And was that printed because the 1956

20 edition had run out?

21 A. Sad to say, yes.

22 Q. You -- you had a popular work there?

23 A. I -- it dumbfounded me, really.

24 Q. How many copies of this thing do you think

25 got distributed between 1952, 1956, and 1960?

1 A. I don't know.

2 Q. Quite a few of them.

3 A. Quite a few.

4 Q. Did people who got the 1952 edition also
5 get a 1956 edition?

6 A. Not necessarily. I don't know why they
7 would want another one.

8 Q. Now, the -- the 1952 edition and the 1956
9 editions were almost identical, were they not?

10 A. Correct.

11 Q. Let me compare with you the 1956 edition
12 and the 1960 edition to look at the changes or
13 additions that were present there. Now, that's the
14 '56 edition, and here's the '60 edition.

15 I thought we might look at the -- just
16 the index or table of contents.

17 A. Okay.

18 Q. It appears that in 1960 you added some
19 additional chapters. We've still got "Unloading
20 Tank Cars." We've still got "Storage Tanks," got a
21 "Gasketing and Pump Tanking" -- "Pump Packing."

22 A. Uh-huh.

23 Q. We've got "Sampling Methods." We've got
24 "Laboratory Analysis and Test Procedures."

25 A. Uh-huh.

1 Q. We've got a section on "Typical
2 Properties."

3 A. Oh.

4 Q. And then we have a new Chapter No. 8 in the
5 1960 edition, don't we, called "Quality Requirements
6 of Aroclors Prior to Use in Electrical Industry"?

7 A. Yes. Okay.

8 Q. And then we have a chapter on "Earth
9 Refinement." That's Chapter 9 here --

10 A. Yes. Yes.

11 Q. -- where it used to be Chapter 8?

12 A. Right.

13 Q. And then we have another chapter called
14 "Contamination," which is new.

15 A. Yes.

16 Q. And another chapter called "Reworking
17 Contaminated Transformer Askeral," which is new?

18 A. Yes.

19 Q. And then the same last chapter --

20 A. Yes.

21 Q. -- called "Dermatology and Toxicology,"
22 correct?

23 MR. CRAWFORD: David, have you
24 identified both those documents by numbers?

25 MR. LACEY: I believe we have.

1 The 1956 document is 2052 through
2 2138, and the 1960 document is 2139 through 2252.

3 MR. CRAWFORD: Okay.

4 MR. LACEY: Have we got a -- have we
5 got something on Mr. Wheeler?

6 MR. SHOEBOOTHAM: Why don't we -- why
7 don't we go off the record?

8 MR. LACEY: Well, why don't we just go
9 ahead and leave it on the record so I've got it?
10 That will --

11 MR. SHOEBOOTHAM: Why don't we take it
12 off the video?

13 MR. LACEY: That's fine to take it off
14 the video. That's --

15 THE VIDEOGRAPHER: We're about to go
16 off the record -- off the video. The time is 3:03
17 p.m.

18 THE REPORTER: Who are you, please?

19 MR. SHOEBOOTHAM: I'm John Shoebotham.
20 I'm an attorney representing Monsanto Company.

21 MR. CRAWFORD: God, do we need to
22 swear him in?

23 MR. SHOEBOOTHAM: Mr. Benignus, I
24 haven't met you. I'm Mr. Shoebotham.

25 THE WITNESS: I'm Mr. Benignus.

1 MR. SHORROTHAM: I am going to --
2 Mr. Lacey has asked me for dates on which
3 Mr. Wheeler, Mr. Elmer Wheeler, will be available
4 for his deposition. Mr. Wheeler will be available
5 for his deposition on May 6, 7, or 8, 1987.

6 Mr. Wheeler would prefer to do the
7 deposition in either Camden or Columbia, South
8 Carolina, due to health considerations. He has
9 difficulties in traveling because of some health
10 concerns. He would be available in either one of
11 those two places, either Camden or Columbia.

12 He, also because of his health
13 concerns, does not want to be in a situation where
14 the deposition days last too long; and we would make
15 him available for two days and would hope that the
16 days would be a little shorter in view of his
17 health.

18 MR. LACEY: What is considered a day
19 that he would want to spend in deposition?

20 MR. SHORROTHAM: I don't know an exact
21 number of hours. I can get that for you, though,
22 certainly.

23 MR. LACEY: Okay.

24 MR. SHORROTHAM: I suggest we schedule
25 him perhaps for May 7th and 8th, if that's

1 acceptable with you; but I think any one of those
2 three days are fine with him.

3 MR. LACEY: Is there one place that's
4 easier to get to than the other?

5 MR. SHORBOTHAM: I would guess
6 Columbia, but I don't know.

7 MR. LACEY: Let me get back to you by
8 Friday.

9 Are you going to be going out to San
10 Diego?

11 MR. SHORBOTHAM: No.

12 MR. LACEY: Let me get back to you by
13 Friday, either by phone or whatever; and we'll pick
14 a date and a place after I've checked the airline
15 schedule.

16 I am inclined at this time to go with
17 the 7th in Columbia just because I suspect we can
18 get there easier than Camden.

19 But you are able to assure me you will
20 be able to produce him?

21 MR. SHORBOTHAM: Yes.

22 MR. LACEY: So, we will not go
23 pursuant to the subpoena?

24 MR. SHORBOTHAM: This is off the
25 record.

(Discussion off the Record)

Q. (By Mr. Lacey) With the 1960 version of "The Proper Handling of Aroclors and Their Mixtures in the Electrical Industry," what was the purpose of adding the chapters on "Quality Requirements," "Contamination," and "Reworking Contaminated Askeral"?

A. The purpose of the whole thing, I assure you, was to pass along any information that we had that we felt would be of interest. And we've done our very best.

Q. Okay.

A. And you understand the area I am concerned in.

Q. Yes. And, again, this 1960 version, like the previous two versions, had all the detailed information about exactly how Monsanto did each step in every chapter except "Dermatology and Toxicology," correct?

A. This is correct.

Q. Okay. And in that chapter on "Dermatology and Toxicology" what was supplied was the information the medical department gave to you to include in this work?

A. That's the information that was available

1 to me, correct.

2 Q. Right. Did you actually review the
3 information provided to you about dermatology and
4 toxicology to ensure that it met what you knew; or
5 just because it was supplied, you put it in?

6 A. It met what I had read previously. And I
7 think this is it. And this refers to things that
8 had been published in the literature, et cetera.

9 Q. Let me ask you a couple of questions about
10 some of the material in that section on dermatology
11 and toxicology.

12 A. All right.

13 Q. I think that the language remains
14 relatively constant through all three versions.

15 A. It does.

16 Q. See if I can get the three versions here in
17 front of us.

18 This is the 1956 version --

19 A. And this is --

20 Q. The 1960 version.

21 A. '60. All right.

22 Q. And we have here, also, the 1952 version.

23 A. Yes.

24 Q. Now, the first paragraph in each one of
25 these versions -- or additions, I guess, maybe would

1 be the way to put it -- talks about skin contact; is
2 that correct?

3 A. Where?

4 Q. In the first paragraph.

5 A. "Skin shows no primary irritancy or
6 sensitization."

7 I think this is different, isn't it?

8 Q. Well, what I'm asking about is whether the
9 first paragraph in each one talks about skin.

10 A. This one certainly does, the one I'm
11 reading.

12 Q. Okay. And the other two?

13 A. I see "skin" here and "skin" here.

14 Q. Okay. Now, in the 1952 version and the
15 1956 version, the first paragraph about skin is
16 identical in each one, is it not? These two are
17 both identical?

18 A. They seem to be, yes.

19 Q. And, in fact, if we go to the second
20 paragraph, the section on toxicology and skin is
21 identical?

22 A. This is right.

23 Q. The third paragraph is also identical on
24 these two, the '52 and --

25 A. One, two, three.

1 Yes.

2 Q. And the fourth paragraph is almost
3 identical. There's a change in the numbers for the
4 appropriate concentrations, is there not?

5 A. From -- this is a 2; and this was a 1, I
6 sec.

7 Q. Yes. But otherwise, those paragraphs are
8 identical, are they not?

9 A. Correct.

10 Q. Now, in the 1952 version, in that paragraph
11 about air concentrations, you indicated that the
12 safe concentration was in the range of .5 to 1
13 milligram per cubic meter of air, correct?

14 A. Yes.

15 Q. In the 1956 version, you raised that safe
16 concentration from -- to 1 to 2 milligrams per cubic
17 meter of air?

18 A. I didn't raise it. That's probably a
19 typographical error or something.

20 Q. Okay. Okay. So, you think that --

21 A. It's -- it's in the -- it's in the order of
22 magnitude there.

23 Q. Okay.

24 A. There's not anything significant on that.

25 Q. The -- let me go ahead and get the '52 and

1 '56 versions compared before we look at '60, which
2 is somewhat different.

3 A. Okay. All right.

4 Q. The next paragraph -- and I'll just get you
5 to look at those --

6 A. Okay.

7 Q. -- the next paragraph in the 1952 and '56
8 versions are identical, are they not? Here --

9 A. "Laboratory" --

10 Q. -- "Technique."

11 A. All right. Yes.

12 Q. Then the next paragraph is also identical,
13 is it not?

14 A. Yes.

15 Q. And the next paragraph?

16 A. Yes. Now, this is plant procedure --

17 Q. Okay.

18 A. -- Incidentally.

19 Q. Yes. We'll talk about that in a second.

20 A. All right.

21 Q. The next paragraph, is that also identical?

22 A. Yes.

23 Q. And then the last paragraph, is that also
24 identical?

25 A. Yes.

1 Q. So, the only difference between the '52 --
2 A. Is 1 versus 2.
3 Q. -- is the air concentration. And you think
4 that may be a typographical --
5 A. That -- that may be an aberration.
6 Q. Okay. Let's talk about the changes between
7 the 1956 version and then the 1960 version. Now,
8 again, these changes were made by the medical
9 department, information they supplied you; is that
10 correct?
11 A. Well, some of this is the same. I think
12 there are statements added here. If they are --
13 this -- speaking of an open transformer, no, that
14 probably isn't from the medical department. This is
15 from the -- the industry, who -- who makes
16 transformers --
17 Q. Okay.
18 A. -- and our judgment. I -- I would agree
19 with it. If a transformer a temperature above is
20 opened -- if it's above that, "to open, provide
21 exhaust ventilation." I wouldn't need the medical
22 department to tell me that.
23 Q. Okay. Well, let's -- then, let's stop
24 and -- and first look at the 1952 and 1956 versions;
25 because apparently the 1960 version has some

1 information that you put in there other than from
2 the medical department, correct?

3 A. I would say this is correct.

4 Q. Well, let's stop; and let me ask you to
5 look at the 1956 version of your "Dermatology and
6 Toxicology" section. Could you do that for me?

7 A. This? You want me to look at --

8 Q. Yes, the 1956 version.

9 A. I'm seeing it.

10 Q. Well, that's -- you're actually looking at
11 the 1960.

12 A. '60. Well, I don't have the '56 version.

13 Q. That's what I'm trying to --

14 A. Oh.

15 Q. -- hand you right here.

16 A. Oh, all right.

17 I'm seeing it, yes.

18 Q. Okay. Can I hand that to you?

19 A. Oh, sure.

20 Q. Okay. Now, in looking at the information
21 on dermatology and toxicology in the 1956 version --

22 A. That's this.

23 Q. -- of your book, what information in there
24 did not come from the medical department, if any?

25 A. Only the second page, too. For instance,

1 "Localizer spot ventilation together with general
2 **workroom** exhaust is recommended for plant
3 **operations.**"

4 Q. Did that come from the medical department?

5 A. I really don't know. I really don't know,
6 but it is there.

7 Q. Where might it have come from if not from
8 the medical department?

9 A. It's a statement that makes sense. I would
10 think maybe from the industrial hygiene -- well,
11 that is the medical department.

12 It's a statement that certainly makes
13 sense and could have well come from the medical
14 department or the plant department or -- or
15 wherever.

16 Q. What about that next --

17 A. In other words, it talks about spot
18 ventilation.

19 Q. All right. What about that next paragraph,
20 **which** indicates that canvas gloves, safety glasses,
21 **or goggles** should be worn when sampling tank cars;
22 did that come from the medical department?

23 A. It was -- I don't know if it originated
24 with the medical department or whether it came from
25 the plant.

1 Q. Okay.

2 A. It may have come from the plant. But

3 certainly, run by the medical department, I'm sure

4 they would agree. It seems to me that that is a

5 plant procedure that you asked about.

6 Q. Now, in regard to this paragraph talking

7 about sampling tank cars, does that talk only about

8 when sampling tank cars; or does that talk about

9 other procedures, in addition, where a person is

10 working with PCB's?

11 A. It says, "when sampling tank cars."

12 Q. Yeah. So, the next sentence --

13 A. That's why I say I think it came from our

14 plant.

15 Q. Okay. And does the next sentence about

16 clothing also refer to people who sample tank cars?

17 A. That would -- should -- should apply to

18 anybody, yourself or myself, if it gets spilled on

19 us, yes.

20 Q. Okay. So, the section there that says no

21 special clothing is required and recommends

22 laundering the workers' garments weekly --

23 A. Yes.

24 Q. -- would refer not only to people sampling

25 tank cars, but also to people working in a plant

1 with PCB's?

2 A. Yes. Yes.

3 Q. Okay.

4 A. That's why that is there. Yes, that's a
5 general statement.

6 Q. With regard to the remainder of this -- the
7 next last two paragraphs, did that also come from
8 the medical department or from some other source?

9 A. I would say that this came from the
10 capacitor-impregnating industry. This is standard
11 practice there, when opening a
12 capacitor-impregnating chamber, that a respirator
13 should be worn during these short intervals. One
14 would find a respirator in that area.

15 Q. So, the people that you were writing this
16 for gave you the information to put in there to
17 write back to them, then?

18 A. It could have originated there, yes.

19 Q. Did it originate there?

20 A. I would say that statement did originate
21 there.

22 Q. Okay. So, that didn't come from the
23 medical department, then?

24 A. I wouldn't think so. I think they would
25 agree with this as a matter of fact. That's why a

1 respirator is there, to protect.

2 Q. Okay. What about the last paragraph? Did
3 that paragraph come from the medical department?

4 A. I'm not sure that this came from the
5 medical department or whether this came from general
6 consensus from the -- from the industry.

7 Q. There is a reference there to chlorinated
8 benzene. That is talking about the benzene ring
9 that you drew for us yesterday, but replacing one or
10 more of the hydrogen atoms on it with a chlorine
11 atom?

12 A. Yeah.

13 Q. Okay. And some of the transformer fluids
14 had a mixture of PCB's and chlorinated benzene; is
15 that correct?

16 A. This is correct.

17 Q. And that's why you reference chlorinated
18 benzene?

19 A. This is correct.

20 Q. Now, let me ask you to look, if you would,
21 at the 1960 version. I'll take that '56 version --

22 A. Okay.

23 Q. -- and get it out of the way here.

24 Let me look at the 1960 version with
25 you. And let's go back to the first portion of the

1 section there on -- we've gone -- we've missed it,
2 haven't we?

3 Trying to find where it begins. Here
4 we go.

5 A. Oh.

6 Q. The chapter on dermatology and toxicology
7 starts at Document No. 2243. Now, the first
8 paragraph, does that come from the medical
9 department?

10 A. I would say so.

11 Q. All right.

12 A. That's my impression.

13 Q. And, again, you have indicated to me that
14 you would say, if -- if it were up to you, that if
15 PCB's get on the skin, they should be washed off
16 immediately with soap and water, correct?

17 A. Within reasonable promptness, yes.

18 Q. Okay.

19 A. Right. I would say that any time.

20 Q. Now, the second paragraph, that's that same
21 paragraph on sampling tank cars, correct?

22 A. Yes. Yes.

23 Q. And the second sentence there talks about
24 the general attire of workmen both around tank cars
25 and in the plant, working with PCB's, correct?

1 A. Say this again.

2 Q. Yes. The first sentence in this second
3 paragraph --

4 A. "When sampling tank cars."

5 Q. -- talks about wearing gloves --

6 A. Yes.

7 Q. -- and safety glasses when sampling tank
8 cars?

9 A. Yeah.

10 Q. Now, the second sentence talks about no
11 special clothing and laundering the workers'
12 garments once a week?

13 A. Yes.

14 Q. Now, that relates not only to people
15 sampling tank cars, but also to people working in
16 the plant with PCB's?

17 A. Yes.

18 Q. Okay.

19 A. Yes.

20 Q. Now, the third paragraph talks about
21 burns.

22 A. Uh-huh.

23 Q. Did that information come from the medical
24 department?

25 A. Yes.

1 Q. And it also has in there the eye --

2 A. Yes.

3 Q. -- problem and suggests to see a doctor if
4 there's --

5 A. Yes.

6 Q. -- eye contact?

7 A. Right. That came from the medical
8 department.

9 Q. Okay. If we go to the next page, where it
10 talks about vapors in the first paragraph --

11 A. Yes.

12 Q. -- did that information come from the
13 medical department?

14 A. Yes.

15 Q. Now, again, here on the concentration
16 levels --

17 A. Wait a minute. Wait a minute. Wait a
18 minute. Wait a minute.

19 "Vapors from hot Aroclor or Askeral
20 have a degree of toxicity and should not be inhaled
21 over a prolonged period of time." This, the medical
22 department would agree with. I would say this.
23 This just makes common, ordinary sense, that the
24 vapors from the hot Aroclor or Askarels have a
25 degree of toxicity and should not be inhaled over a

1 prolonged period of time.

2 Anything I've ever stated said avoid
3 breathing the vapors and dusts from PCB's. And this
4 is well established. So, the medical department, I
5 assure you, would not disagree with it. I'm well
6 aware of this myself. I've always said this. It's
7 a, you might say, well-documented and
8 well-established statement.

9 Q. Well, did that --

10 A. Do not inhale vapors from a PCB's.

11 Q. Did that statement, though, come from the
12 medical department; or is that your statement?

13 A. Originally it would have come from the
14 medical department.

15 Q. Okay. Now, in this section we return to
16 the .5 to 1 --

17 A. Excuse me. It would come from the medical
18 department within the boundaries of Monsanto. And
19 anybody that knows about PCB's would -- would agree
20 with this. Anyone understanding PCB's would agree
21 with it. I have no area of disagreement, is what
22 I'm saying on this.

23 Q. Okay.

24 A. Okay?

25 Q. And it -- and it comes from the medical

1 department, initially?

2 A. Yes.

3 Q. Okay. Well, do you disagree with anything
4 in here that comes from the medical department?

5 A. No, I don't.

6 Q. Okay. Now, in this first paragraph,
7 talking about air concentration --

8 A. Yeah.

9 Q. -- and vapors --

10 A. Yeah.

11 Q. -- we see the .5 to 1 milligram per cubic
12 meter of air again.

13 A. Yes.

14 Q. That goes back to the 1952 version, does it
15 not?

16 A. Yes.

17 Q. Okay. Now, when we go to the second
18 paragraph, does that information come from the
19 medical department?

20 A. No. The medical department doesn't
21 necessarily know that a capacitor impregnation may
22 be done at a temperature as high as 266 degrees
23 Fahrenheit. They would have read this, but this
24 didn't come from the medical department.

25 This came from knowledge as to how

1 high the impregnation is done, at times 130 degrees
2 centigrade.

3 Q. So, that second paragraph on Document
4 No. 2244 comes from somebody other than the medical
5 department?

6 A. It comes from the knowledge that capacitors
7 are often impregnated as high as 130 degrees
8 centigrade, correct.

9 Q. And is that something you knew and wrote
10 down?

11 A. Something I would have known.

12 Q. Okay.

13 A. And any capacitor maker would have known.

14 Q. What about the third paragraph; does that
15 also come from something you knew, as opposed to the
16 medical department?

17 A. I would know this, and the medical
18 department would know this.

19 Q. Well, did that statement in the third
20 paragraph come from the medical department or you?

21 A. This statement here?

22 Q. Yes.

23 A. It could have come from either.

24 let me say this: If I were to say to
25 the medical department that the Askeral transformers

1 are used at temperatures above -- excuse me. Oh --
2 "if transformer Askarels" -- I'm sorry -- "fluids
3 are used at temperatures above this to fill an open
4 transformer" -- okay -- "exhaust ventilation should
5 be provided in the immediate area."

6 Now, 150 degrees F is more typical of
7 a transformer situation than 130 degrees C. Now, I
8 know if Askarels are heated to this temperature,
9 the -- there will be vapors and fumes; and,
10 therefore, this calls for exhaust ventilation, as I
11 say; because any time you hear me say anything, I
12 say, "Do not breathe the vapors emitted at elevated
13 temperatures." And I would say that 150 degrees
14 Fahrenheit is -- is perhaps the starting point of
15 that.

16 Q. Well, my question to you, though, is
17 whether that third paragraph on 2244 is something
18 that was provided to you by the medical department
19 or that you put in yourself based on your own
20 knowledge.

21 A. I think I provided it and -- and discussed
22 it and ran it through the medical department and it
23 was put in here.

24 Q. Okay. What about the fourth paragraph on
25 2244 --

1 A. This one?

2 Q. -- did that come from the medical
3 department or from you?

4 A. This came from the industry. And you'll
5 run into this statement in other literature that is
6 from the industry.

7 Q. Who in the industry provided you with that
8 information?

9 A. People who made transformers would have
10 been the ones to comment and provide this,
11 transformer manufacturers.

12 Q. That one --

13 A. Because they are the people who impregnated
14 capacitors and filled transformers, and this is
15 their consensus. And to my knowledge, I don't know
16 of anything that would refute the industry's -- it
17 demonstrates the industry's ability to handle these
18 fluids without hazards to the workmen.

19 Nobody that I know of came to Monsanto
20 with a problem along these lines. It says, "The
21 years of satisfactory use demonstrates the industry
22 ability to handle these fluids."

23 Q. Did you go --

24 A. That's the consensus in the industry.

25 Q. Did you go out and canvass the companies

1 that used Askarels to determine that they had not
2 had any problems?

3 A. No.

4 Q. Well, how did you come up with the language
5 for that statement, then?

6 A. I think you'll find that in -- in
7 publications.

8 Q. Well, we've seen similar statements in
9 other Monsanto publications.

10 A. No. I mean other than Monsanto
11 publications.

12 Q. Whose publications will we find that in?

13 A. Well, I think you'll find that in some
14 later publications where the electrical industry
15 writes about these things.

16 Q. Well, what publications would I look at to
17 find that?

18 A. I would say ANSI and NEMA.

19 Q. Okay. And that's National Electrical
20 Manufacturers Association?

21 A. Yes.

22 And you haven't looked at these, yet.

23 Q. Okay. Maybe we can do that.

24 The last paragraph on that page --

25 A. All right.

1 Q. -- we've missed that -- is talking about
2 good housekeeping. Where did that statement come
3 from?

4 A. This is a general, you might say,
5 observation, a general statement, that it is both
6 simple and in line with good housekeeping and
7 personal cleanliness, the exercise of suggested
8 precautions in all cases.

9 Q. Did that come --

10 A. It's a sensible statement to make, isn't
11 it?

12 Q. Well, my question is: Where did it come
13 from? The medical department or you?

14 A. They would certainly agree with it.

15 Q. But where did it come from, initially? You
16 or the medical department?

17 A. I really don't know. It's a general
18 interest statement of common sense. It's -- it's
19 not a detailed medical presentation of medical data
20 or so forth.

21 Q. It doesn't have much specifics with it?

22 A. It doesn't have much specifics. It's just
23 an overall general statement to exercise these
24 precautions. Why make these precautionary
25 statements if you're going to say don't exercise

1 them?

2 Q. Okay.

3 A. This is what I'm trying to say.

4 Q. Okay. And then we've got the last --

5 A. Yeah. "Arced Askeral."

6 Q. Yeah.

7 A. Uh-huh.

8 Q. Where did this paragraph come from?

9 A. This comes from observations and studies by
10 the Underwriter's Laboratories, originally. Those
11 studies were sponsored at the Underwriter's by
12 people like General Electric and Westinghouse and so
13 forth.

14 Q. So, this comes from Underwriter's
15 Laboratories' materials?

16 A. This is where this comes from.

17 Q. Okay.

18 A. This is where that originates.

19 Q. Have we found out the sources of all the
20 statements that you've got in this 1960 version on
21 "Dermatology and Toxicology"?

22 A. As far as I know.

23 Q. Okay. And you were the author of the book,
24 at least nominally?

25 A. Yes.

1 Q. Okay. Let me ask you about your knowledge
2 of the way transformer plants and capacitor plants
3 operated. Did you ever visit your customers' plants
4 to see how they operated?

5 A. I've been in plants, yes.

6 Q. What plants did you visit?

7 A. I visited -- I've been in the plant at
8 Hudson Falls, New York.

9 Q. Whose plant is that?

10 A. General Electric.

11 Q. What other plants?

12 A. I've been in -- I visited the plant at
13 Bloomington, Indiana, once.

14 Q. Whose --

15 A. I don't know if it was operating, but I
16 was -- I've been --

17 Q. Whose plant --

18 A. -- in the building.

19 Q. Whose plant was that?

20 A. That's Westinghouse.

21 Q. Okay.

22 A. I've been in the building.

23 Q. What other plants?

24 A. Electrical Utilities at LaSalle, Illinois.

25 Q. LaSalle?

1 A. They might have been -- LaSalle, yeah.
2 They're out of business.
3 Q. Electrical Utilities?
4 A. Yes.
5 Q. What others?
6 A. I really didn't -- I want to explain
7 something here. I seldom -- I never did really go
8 out specifically to visit a plant. It was
9 incidental on calling on the people that they
10 would -- somehow or other we'd get out into the
11 plant area, to get a Coke or something like that and
12 so forth.
13 Q. I see.
14 A. I did not specifically put on my hat and
15 coat to go out and visit anybody's plant.
16 Q. What did you observe being manufactured at
17 the G.E. plant in Hudson Falls, New York?
18 A. Capacitors.
19 Q. What did you observe being manufactured at
20 the Westinghouse plant in Bloomington?
21 A. Capacitors.
22 Q. And what did you observe being manufactured
23 in the LaSalle, Illinois, Electrical Utilities
24 plant?
25 A. Yes. Capacitors.

1 Q. Have you ever been in a plant where
2 transformers are manufactured?

3 A. I've been at plants where transformers are
4 manufactured. I'm trying to --

5 You want to know whether I inspected
6 the plant; is that it?

7 Q. No. What plants have you been at where
8 transformers are manufactured?

9 A. Oh, have I been at where transformers are
10 made?

11 Q. Uh-huh.

12 A. I've been at the Westinghouse plant.

13 Q. Where?

14 A. At Sharon, Pennsylvania. Now, you
15 understand "at the plant" doesn't mean that I was
16 out in the factory?

17 Q. I understand.

18 A. Okay. Okay.

19 Q. What other plants have you been at where
20 transformers were manufactured?

21 A. I was at the plant buildings, office, at
22 Rome, Georgia -- G.E. at Rome, Georgia.

23 Q. That was a transformer plant?

24 A. That's a transformer plant.

25 Q. Okay. What else?

1 A. I was at an office in G.E.'s transformer
2 plant at Pittsfield, Massachusetts.
3 Q. What else?
4 A. I think I've been at the plant of
5 Allis-Chalmers at Pittsburgh, called on a man there.
6 Q. What other plants?
7 A. Wagoner Electric and Maloney Electric.
8 Q. Where were those located?
9 A. St. Louis.
10 Q. Both of them?
11 A. Uh-huh.
12 Q. What else?
13 A. I think that's about it.
14 Q. Okay.
15 A. There are not that many.
16 Q. Okay. When you visited the General
17 Electric Hudson Falls, New York, capacitor plant,
18 did you go into the area where capacitors were being
19 made?
20 A. I have been in the area at Hudson Falls
21 where capacitors were being made, yes.
22 Q. Did you --
23 A. I walked through there.
24 Q. Did you observe the process of manufacture
25 going on?

1 A. Yes. Not that I was there to inspect it;
2 but, yes, I observed.

3 Q. Did you observe the Aroclor materials being
4 handled in a way that you thought was appropriate?

5 A. Well, they were handled in -- in this
6 particular location -- it was appropriate, as far as
7 I was concerned, walking through there.

8 There was ventilation, yes. I -- I
9 was not in a position to challenge and so on and so
10 forth.

11 Q. Well, my question, though, is whether or
12 not you thought what you saw was appropriate or
13 not.

14 A. I accepted that that's what they were
15 doing.

16 Q. That's not my question.

17 A. I realize this.

18 Q. Well, could you answer my question?

19 A. I would say I accepted what -- what they
20 were doing there.

21 Let me put it this way: I was not
22 bothered by anything as I walked through there.
23 From that point of view, it's acceptable to me and
24 appropriate.

25 Q. Okay.

1 A. I was not subjected to what I would
2 consider a harmful exposure to fumes, because what I
3 was going by it was essentially at room
4 temperature. They were not opening a capacitor
5 chamber and this sort of a thing. I did not put on
6 a mask. There was no occasion. Things were at
7 normal temperature.

8 Q. Okay. When --

9 A. So, from that point, I would say okay.

10 Q. When you went to the Westinghouse capacitor
11 plant in Bloomington, Indiana, did you go into the
12 area where capacitors were being made?

13 A. I don't think it was in operation. When I
14 went there, I was asked -- they had moved there, and
15 Ralph Marberry had taken great pride in designing
16 that plant; and they had moved from East
17 Pittsburgh.

18 And he had set up a manifold system --
19 system of impregnation. And his purpose of showing
20 me this was to show this method, which was different
21 from the usual method, which is batch flooding. He
22 impregnated each capacitor individually.

23 But I -- the thing wasn't running. It
24 was new. It was there. He had just designed and
25 built this thing.

1 Q. So, you saw the plant before it actually
2 started up?

3 A. As I remember, I saw it before it started
4 up.

5 Q. Did it appear to you that the plant was
6 designed as a new plant with appropriate
7 ventilation?

8 A. I don't think it was running at that time.

9 Q. No, that's not my question. Whether it was
10 designed --

11 A. Oh, I don't know.

12 Q. -- to have the appropriate ventilation.

13 A. I didn't inspect it. I didn't inspect it.

14 Q. You didn't observe anything about that?

15 A. I didn't inspect their ventilating systems
16 and so forth, no.

17 Q. So, you certainly couldn't criticize this
18 plant that had been designed by Mr. Marberry?

19 A. I never did. No, I couldn't.

20 Q. And were you impressed --

21 A. And I wasn't asked to.

22 Q. I understand.

23 A. I wasn't there to do that. He merely
24 showed this to me.

25 Q. Well, were you impressed with the design he

1 had for impregnating these capacitors and thought it
2 was a good one?

3 A. I would think so. I see nothing wrong with
4 a manifold impregnation. In fact, he felt there was
5 an advantage to it, I guess.

6 Q. Okay. And you didn't see any disadvantage
7 to it?

8 A. I saw no disadvantage to it.

9 Q. Well, what about when you visited the
10 LaSalle, Illinois, Electric Utilities capacitor
11 plant; did you go out into the area where capacitors
12 were being made?

13 A. I was there in the area where capacitors
14 were being made, yes. I've been there.

15 Q. Did you observe anything that caused you
16 any concern about the way they were handling PCB's?

17 A. I felt that their ventilation may not have
18 been all that it should be, but I wasn't there to
19 call their inspector or anything else.

20 Q. Did you see --

21 A. I -- I could smell more Aroclor there at
22 that point in time than I would have expected to.

23 You realize, don't you, that you can
24 smell Aroclor? It's not without detectable odor.

25 Q. What does Aroclor smell like?

1 A. Aroclor has a clean odor, is the best I can
2 describe this to you, a clean odor. It has no odor
3 as perfumes or flowers or anything like that.

4 Q. You wouldn't use it as perfume?

5 A. No, because it doesn't impart that kind of
6 delicate odor.

7 Aroclor doesn't smell bad. It smells
8 clean. May I say "clean odor?"

9 Q. This is new Aroclor?

10 A. It's -- let me say this: The nearest I can
11 say that might be familiar to you is if you go into
12 the washroom in a public place and you smell the
13 naphthalene -- okay? -- in other words, the
14 disinfectant. It's not a odor that upsets one.
15 It's -- it's a clean odor. And it's not a strong
16 odor at normal temperatures.

17 Q. This is -- this is fresh Aroclor?

18 A. Well, I don't know what you mean by "fresh
19 Aroclor."

20 Q. Unused.

21 A. I'd say -- unused?

22 Q. Yes.

23 A. That's true of unused; and it's true of
24 used, too.

25 Q. So, even Aroclor in a failed transformer or

1 a failed capacitor is going to have that same smell?

2 A. Oh, now, wait a minute.

3 Q. Well, that's what I'm trying to find out.

4 A. Oh. Well, now, failed, you're probably

5 talking about an arcing failure of a transformer or

6 a case of a capacitor where the thing has consumed

7 itself.

8 Q. What smell would Aroclor have there?

9 A. In those situations -- remember, there's

10 more than PCB inside a transformer. There are

11 cellulosic materials, in the case of a transformer,

12 pressboard, wood, and things like that.

13 And if this thing has been subjected

14 to the heat one generates when there's an arc-formed

15 gas, you're going to get carbonization and odor

16 and -- and so forth that is not at all normal at

17 all. It's going to smell. You better believe it.

18 Q. It's going to have an unpleasant smell?

19 A. Oh, yes.

20 Q. Okay.

21 A. And you have hydrogen chloride. Yes, very

22 pungent.

23 Q. Okay. Now, at this Electric Utilities

24 plant in LaSalle, Illinois, you did not feel that

25 they had the ventilation they should; is that

1 correct?

2 A. I said this as a general thing, yes.

3 Q. Did you --

4 A. Although, I was not uncomfortable. But --

5 Q. Did you express your concern to the people
6 there at the plant that they were not handling it
7 well?

8 A. No.

9 Q. You just kept your mouth shut and went on?

10 A. I wasn't being asked. And, after all,
11 they've been working in there day and out -- day in
12 and day out with no report of any health hazards
13 and --

14 Q. Did you ask them when you were there about
15 health problems?

16 A. No, I didn't.

17 Q. You just -- back at Monsanto where you
18 normally stayed, you never had heard anything about
19 a health problem there at that plant?

20 A. That's right. I hadn't heard of a health
21 problem at any of these places.

22 Q. But had you ever gone to any of these
23 places and attempted to determine whether they had
24 any health problems?

25 A. No, I didn't.

1 Q. Well, you haven't heard of them. You
2 haven't -- you haven't inquired about any, either.
3 It's just --

4 A. This is correct.

5 Q. Okay. When you went to the Westinghouse
6 transformer plant in Sharon, Pennsylvania, did you
7 go out into the area where transformers were
8 manufactured?

9 A. Yes, where they were being -- the cores
10 were being wound. Yes, I remember that.

11 Q. Did you observe their use of PCB's?

12 A. I don't think, actually, that I did. I
13 must have passed some tanks where they were. I
14 didn't -- in that plant, the only thing I remember
15 there was people winding the core and the coil of
16 transformers. I wasn't there when they were being
17 impregnated.

18 Q. Okay. What about the transformer plant
19 that General Electric had in Rome, Georgia? When
20 you were there, did you go into the area where --

21 A. I wasn't in the plant there ever.

22 Q. Okay. So, you don't know whether they were
23 using them well or not?

24 A. No. I wasn't in the plant there, no.

25 Q. Okay. What about the General Electric

1 transformer plant in Pittsfield, Massachusetts; did
2 you go into --

3 A. I was not in the plant.

4 Q. Okay.

5 A. No. I was in the office.

6 Q. What about the Allis-Chalmers transformer
7 plant in Pittsburgh; did you go into the plant area?

8 A. No. I was not in the plant, no.

9 Q. What about the Wagoner Electric plant in
10 St. Louis; were you in the plant area?

11 A. I was in that plant area --

12 Q. Did you observe them --

13 A. -- at one time.

14 Q. Did you observe them using PCB's?

15 A. I think so, yes. This was many years ago;
16 but I would think so, that -- there were some
17 transformers there in various stages, and I would
18 think that they were using PCB's at the Wagoner
19 plant.

20 Q. Did you observe anything about their use of
21 PCB's that gave you any concern?

22 A. No. No, I didn't.

23 Q. What about the Maloney transformer plant in
24 St. Louis; did you go into the transformer area?

25 A. No, I was never in that -- in that plant.

1 Q. So --

2 A. I'm not sure I was at their office, even.

3 Q. Okay. So, the only transformer plant you

4 can actually remember going to where you saw PCB's

5 in use was the Wagoner plant in St. Louis?

6 A. That they were actually in process of

7 filling transformers -- I'm trying to think.

8 Obviously these other -- all of these other plants

9 used PCB's and made transformers at one point or

10 another. They were filling transformers with PCB's

11 and so on and so forth.

12 Q. But you didn't observe them doing it?

13 A. I didn't observe that in the transformer

14 area. I have observed in the capacitor area where

15 they were impregnating capacitors. It was -- in one

16 case it was --

17 Q. Which plant was that?

18 A. Well, Electric Utilities, I mentioned.

19 Q. Okay. Well, that's what I am saying.

20 A. That was capacitors.

21 Q. As I understand your testimony, you have

22 observed the use of PCB's by a customer of Monsanto

23 on one occasion for sure: That's the capacitors at

24 Electric Utilities in LaSalle?

25 A. No. There's was more than one occasion for

1 capacitors.

2 Q. What others?

3 A. Well, the Electric Utilities at LaSalle.
4 That's one.

5 Q. You've told me about that one.

6 A. I've seen the -- I was in the plant at G.R.
7 at Hudson Falls.

8 Q. I thought you told me you didn't actually
9 see them using the PCB's at that point.

10 A. Well, I saw the PCB's standing there, in
11 vats.

12 Q. Okay.

13 A. That's -- that's -- is that using it?

14 Q. Well, I guess that's what I'm trying to
15 find out. I mean --

16 A. I would say that that is material in one
17 stage or another of use.

18 When -- when the impregnation goes on,
19 you see, this is under vacuum and pressure in a
20 closed reactor.

21 Q. Were you able to see the PCB's in these
22 open vats at Hudson Falls?

23 A. At Hudson Falls? Yes.

24 Q. Okay.

25 A. Just as though it was in this room here.

1 It was a vat that -- well, maybe be from here to
2 almost that wall long and about this wide; and these
3 power capacitors were in there. And this is what
4 was rolled, moved, into this cylindrical
5 impregnating chamber.

6 Now, what I saw was the capacitors
7 after they had been impregnated and they had been
8 cooled down; and they were sitting there in these
9 vats, waiting to be soldered.

10 Q. Okay. Did you see any workmen actually
11 working with them?

12 A. There were workers in the plant, yes.

13 Q. Actually working with the PCB's in the
14 capacitors?

15 A. Not the -- the particular -- what do you
16 want to call it? -- these tanks that I saw. We just
17 walked by them, and they were sitting in there.

18 Q. Okay. Anyplace else that you haven't told
19 me about where you've actually observed either
20 capacitor or transformer manufacturers working with
21 the PCB's?

22 A. I'm trying to think. It's -- it's been
23 years ago.

24 A. Where -- where could I have -- I'm thinking
25 now about transformers.

1 I believe -- no, no. I didn't see
2 them working with it there.

3 I've been in the plant. Again, it was
4 not operating; so, I didn't see them working with it
5 at Aerovox. That's capacitors.

6 Q. But you didn't --

7 A. I've seen their facilities, but it was not
8 in operation. They weren't working with it.

9 Q. So, you've told me, as far as you can
10 recall, places where you've actually seen PCB's
11 being used?

12 A. This is right.

13 Q. Okay. Did you ever visit --

14 A. I don't mean to say that this is
15 everything. I've done my best to answer you.

16 Q. That's all I can ask.

17 A. Yeah.

18 Q. Did you ever visit the Monsanto plants
19 where PCB's were actually produced?

20 A. Yes.

21 Q. Did you visit both the Anniston, Alabama,
22 plant --

23 A. Yes, both.

24 Q. -- and the --

25 A. I've been in both plants.

1 Q. -- and the Krummrich plant?

2 A. Correct.

3 Q. Tell me what you observed about Monsanto's
4 PCB production in the Krummrich plant?

5 A. I'm going back years ago, and I'm going to
6 make a general observation. Years ago chemical
7 plants were not as clean as they are today. I think
8 we all know this.

9 The Aroclor plant at Krummrich was
10 outdoors. I was aware Aroclor was being made.
11 There were tanks and stills there that were at
12 higher temperatures. The equipment and the
13 chlorinators, et cetera, were -- were not cool and
14 idle. They were in operation. Even though this was
15 out of doors, I was aware I was around the odor of
16 Aroclor.

17 I will say this: I was there in more
18 recent years, probably around 1968. And by that
19 time, things had improved by way of cleanliness. I
20 think that's a general observation.

21 Q. When were you first there, the first time
22 you were describing for me, about what period of
23 time?

24 A. I would probably put this sometime in the
25 1950's. In the 1950's, sometime around there.

1 Because I would go to the laboratory at the
2 Krumrich plant; and there's where I saw Aroclor
3 used, tested, and so on and so forth. In the
4 laboratories, yes.

5 Q. Did you also go out into the plant area
6 where it was being manufactured?

7 A. I said, yes, I was out there.

8 Q. Okay. Did you observe any special
9 precautions taken by the workmen to avoid contact
10 with Aroclors or any precautions taken by Monsanto
11 to keep the workmen from coming into contact with
12 Aroclors?

13 A. I did not. I observed hard hats. I wore a
14 hard hat. I observed gloves being worn as one would
15 wear going -- wear climbing onto a tank car or -- or
16 going up iron stairs, et cetera, and an iron
17 railing, and maybe rolling some drums.

18 These gloves were not there for the
19 purpose of covering the hand skin from the Aroclor.
20 Neither did I have anything. I had goggles was --
21 this was standard practice. You go into a plant,
22 they give you protective goggles; yes, I had this.
23 And these are safety goggles, for instance, or
24 glasses. That was a requirement when you went into
25 a chemical plant.

1 At one point in time, whether you went
2 to the PCB area or not, they would give you a smock
3 to wear; but you had that whether you went to
4 Aroclor or not.

5 Q. Anything else?

6 A. They wear safety shoes, but not because of
7 the PCB. They didn't want any heavy thing to break
8 their toes.

9 Q. Talking about steel-toed shoes?

10 A. Steel-toed shoes, yes.

11 Q. Anything else?

12 A. No. I'd say that's it.

13 Q. Did you see any changes between the way the
14 workmen were exposed or not exposed to PCB's when
15 you went back to the Krummrich plant in the late
16 60's, other than the fact it was cleaner and you
17 couldn't smell it?

18 A. No, I couldn't see any difference in their
19 attire, no.

20 Q. What about the Anniston, Alabama, plant;
21 when did you visit that plant?

22 A. I visited Anniston, Alabama -- I would say
23 the first time was in 19 -- maybe '48 or '47,
24 something like this.

25 Q. And what did you observe there about

1 precautions provided by Monsanto for the workmen?

2 A. Essentially the same as I just said for the
3 Krummrich plant.

4 Q. You didn't notice any --

5 A. There are no special protective -- they
6 didn't wear aprons and -- and protective garments.
7 They were attired in their khaki. Some even wore --
8 the supervisor, he wore a white shirt -- I don't
9 know why -- and khaki pants. He didn't -- at times,
10 didn't wear a hard hat, either.

11 Q. Were there special uniforms that Monsanto
12 required all its people to wear? You were supposed
13 to wear a khaki --

14 A. Yes.

15 Q. -- uniform to work?

16 A. Yes. This is a thing that, whether you
17 were in the laboratories or in the plant, you had
18 these uniforms to wear. It was no longer that you
19 came there in your street clothes. You wore these
20 uniforms; and they were laundered by the company
21 and/or furnished and laundered by the company and
22 were changed once a week or twice a week, whatever.
23 If needed, if there was a spill, they would be
24 changed at that time.

25 Q. Okay. So, the workmen had special clothes

1 when they came to work to change into?

2 A. Yes. They -- they didn't work in their
3 street clothes, let me say. Those days were over
4 with, yes.

5 Q. Okay. Any other precautions that were
6 taken with regard to exposure to PCB's?

7 A. Not that I know of, no, uh-uh.

8 Q. The company laundered these clothes for the
9 workmen?

10 A. Yes.

11 Q. You can't think of any other precautions
12 that you observed being taken by Monsanto to protect
13 its workmen from exposure to PCB's?

14 A. No. I never saw anybody wear a mask or so
15 forth.

16 Q. I want to focus your attention now on the
17 matters that took place after the problems of PCB's
18 came to light in the 1960's. Do you know what
19 I'm --

20 A. In other words, you're after, certainly,
21 post 1960; you're up to 1968, would you say?

22 Q. Yes. In the period of time where --

23 A. All right. I'm with you.

24 Q. -- where there comes a --

25 A. Environmental concern.

1 Q. Yes.

2 A. Yes. All right.

3 Q. Now, you were involved in some of the
4 responses that Monsanto made to these concerns, were
5 you not?

6 A. To what concerns?

7 Q. The environmental concerns, the concerns
8 about the potential hazards of PCB's.

9 A. I responded to who? I was --

10 Q. You were involved in some of the response
11 that Monsanto made to those concerns.

12 A. To the environmental people?

13 Q. Yes, the concerns --

14 A. No. No, I wasn't.

15 I was aware of what was going on; but
16 I don't recall responding, in any significant way,
17 directly to the environmental people. No, I don't
18 remember that.

19 Q. No. I'm sorry. That isn't what I meant to
20 ask.

21 You were involved in a part of the
22 response that Monsanto made to those problems and
23 concerns, weren't you?

24 A. Actually, I wasn't.

25 Now, I want you to consider something

1 here. I retired in 1974. Now, you retire at 65.
2 In companies, they tend to put you on the shelf, may
3 I say, certainly five years prior to retirement,
4 maybe earlier than that. Now, by and large, what
5 you're going to run into in this period of time, I
6 was -- if you'll allow me to say it in quotes -- on
7 the shelf.

8 I was not in the directive line. This
9 does not mean that I did not know, in general, what
10 was going on; that I did not maybe talk to someone
11 about this. But when things were handled -- and
12 you're up to 19 -- would you want to go to '70?

13 Q. Well, you tell me.

14 A. Let's go to 1970.

15 MR. CRAWFORD: Well, Mr. Benignus,
16 he's got a document there that I'm sure --

17 THE WITNESS: I know he has.

18 MR. CRAWFORD: Well, why don't you let
19 him ask you about it; and then we'll move on a
20 little faster here?

21 THE WITNESS: I still haven't gotten
22 to say what I wanted to explain.

23 Q. (By Mr. Lacey) Well, why don't you go
24 ahead and explain what you want to explain?

25 A. You know Bill Pappageorge?

1 Q. I think you asked me yesterday. I've heard
2 the name, but I've not met the man.

3 A. Oh, I didn't know this.

4 Q. Yeah.

5 A. I didn't know this.

6 Q. I've not yet met the man.

7 A. He was called to handle these things --

8 Q. And --

9 A. -- specifically. And he did.

10 Q. When he came in, you, as you say, got put
11 on the shelf?

12 A. No, I don't say because Pappageorge
13 arrived. I'm trying to tell you that I was on the
14 shelf somewhat. I already told you that I spent a
15 lot of my time traveling ex-U.S. and this sort of
16 thing.

17 May I see the document?

18 Q. Surely. I've got a document here. It's
19 numbered 508 through 511. And it's a letter that
20 appears to be dated August 6, 1970, on Monsanto
21 Company letterhead --

22 A. Uh-huh.

23 Q. -- and signed by you. For some reason, I
24 don't have any addressee on the letter. I don't
25 know who it was sent to.

1 A. Oh, that helps.

2 Q. Yeah, that is a big help, isn't it?

3 A. Well --

4 Q. Did you normally, when you had letters

5 typed up, show on there who you sent it to?

6 A. This one went to you right now. And we're

7 talking about what we talked the other day, 1016.

8 This, I think, was left open so that

9 people's names would be stamped on because this

10 thing received wide circulation --

11 Q. Uh-huh.

12 A. -- ex-U.S. -- I mean ex-Monsanto.

13 Q. Okay.

14 A. This went as an information piece to our

15 Aroclor 1242 customers. It compares 1016 with

16 Aroclor 1242 --

17 Q. Now --

18 A. -- which was an assignment I had.

19 Q. Okay.

20 THE WITNESS: And what's the date of

21 that?

22 MR. CRAWFORD: August 6th, 1970.

23 A. All right. That is approximately when

24 Aroclor 1016, I think we will find, was being

25 introduced, 1970.

1 Q. (Hy Mr. Lacey) And you were involved in
2 that, were you not?

3 A. Yes, I was. I was the one really involved
4 in covering this with our capacitor customers.

5 Q. You were involved in trying to get them to
6 take on that product?

7 A. I was -- yes. I was -- my duty was to show
8 them the difference in it and that we say there is
9 essentially no difference; that if you people are
10 willing to accept this, it's a step in the right
11 direction to help satisfy the environmentalists; if
12 you're willing to accept this, Monsanto is willing
13 to make it and supply it in replacement for 1242 if
14 you so approve of it. This is what it was.

15 I was giving them specifically --
16 there's a specification, isn't there, a comparison
17 of those specifications?

18 Q. Yes. There's attached a specification
19 for --

20 A. 1016?

21 Q. -- 1016 and for 124 --

22 A. 1242.

23 Q. -- 1242.

24 A. This is exactly what this thing is, yes.

25 Q. Now, I've got another -- what appears to be

1 another copy of that letter -- and I want you to
2 compare it and let me know if it is -- Document
3 15504 through 15508, that apparently indicates a
4 copy of that letter was sent to Mr. Robert E. Abbe,
5 A B B E.

6 A. "Abbe" at G.E.

7 Q. "Abbe"? With G.E.?

8 A. All right. It says here, "You requested
9 this amount, and the" -- "the samples are being sent
10 to you."

11 And Dr. Munch had analyzed -- or had
12 tried this in our laboratory with experimental
13 capacitors and found them satisfactory.

14 Q. Okay. Dr. Munch was a scientist there that
15 was --

16 A. Yeah.

17 Q. He was developing different dielectric
18 fluids in response to --

19 A. Yes, he was. And this was one --

20 Q. This was not the only dielectric fluid?

21 A. Oh, no. We were trying additional things
22 to this. This is the same thing here.

23 Q. Yeah. Appears to be the same letter, does
24 it not?

25 A. This is exactly the same thing, yes.

1 Q. Now, let me show you --

2 A. And this is -- see, it has Abbe at G.E.,
3 which would have been the largest user.

4 If they weren't going to use it, the
5 thing wouldn't go at all. They did use it and we
6 went to that but it didn't satisfy the
7 environmentalists.

8 Q. Okay. Let me show you another letter,
9 Document 512 through 516, dated February 18th, 1971,
10 and signed by you. Is that another one of your
11 letters involving this 1016 --

12 A. Yes, it is.

13 Q. -- problem?

14 A. Yes, it is.

15 Now, this gives more information. Our
16 laboratory now, in '71, has completed life tests.
17 It takes time, you know. This is our additional
18 information. And, yes, this is all of this, the
19 results of life tests --

20 Q. Okay.

21 A. -- giving these people the benefit of what
22 we have observed.

23 Q. And then I have what I believe is another
24 copy of that letter, Document 15696 through 15701,
25 indicating a copy of that letter was sent to General

1 Electric at Hudson Falls, New York.

2 A. That's Abbe again.

3 Q. Okay. Well, I don't see his name on that.
4 Would the Hudson Falls, New York, be Mr. Abbe?

5 A. Well, it means that location, yes. Abbe
6 was the -- Abbe was the direct -- the director of
7 materials. He would be the one we would contact.

8 Q. On the second page of that letter, if you
9 would turn --

10 A. This one?

11 Q. Yes, that letter.

12 In the fourth paragraph from the end,
13 you say, "We have an extensive research program on
14 materials for use in capacitor dielectric systems."
15 Do you see that --

16 A. Where do I see that? On the second page?

17 Q. Yes. Right there.

18 A. Oh. "We would be most pleased to have you
19 visit" -- no.

20 Q. No.

21 A. Oh, all right. I'm sorry.

22 "We have an extensive research program
23 on materials for use in capacitors die" -- yes.
24 We -- at this point in time Munch had set up a
25 laboratory facility to impregnate and life test

1 experimental possible replacements for PCB's. And
2 this was one of them.

3 Q. When -- now, this actually was a PCB
4 product, though, wasn't it?

5 A. Oh, yes. This is a PCB, and this is why it
6 didn't fly. To --

7 Q. When --

8 A. Go ahead.

9 Q. When did Dr. Munch first develop a non-PCB
10 replacement fluid for capacitors?

11 A. I don't know exactly when; but it is in
12 this time frame when we are looking for
13 replacements, whether M-16 or something else.

14 Q. Did Monsanto seek to acquire patents on any
15 of the replacement fluids developed by Dr. Munch?

16 A. Yes. On -- on one, yes.

17 Q. And that was one that you thought had great
18 promise?

19 A. I didn't.

20 Q. You didn't?

21 A. No.

22 Q. Well, why go to the effort of seeking a
23 patent on it, then?

24 A. Well, don't ask me.

25 Q. Okay.

1 A. I don't mean to be -- okay.
2 Q. Did Dr. Munch think it had some promise?
3 A. Why don't you ask him?
4 Q. Okay. You don't know anything about that?
5 A. Sure, I know about it.
6 Q. Well, tell me what you know about it.
7 A. Well, you asked for one with a patent

8 application; so, we'll talk about that one.

9 This was a hydrocarbon base. Now,
10 early on, if I can remember, yesterday we talked
11 about dielectric constant, mineral oil, 2. This is
12 2. And we also saw PCB at 5.

13 Now, we have a hydrocarbon base that
14 does not give the capacitance for the kind of
15 capacitors that we're going to have to make, which
16 are motor-runs and ballast.

17 Now, one way of increasing capacitance
18 is to add what Munch has patented. You can read in
19 the literature. It's a diphenyl sulfone, which has
20 a high dielectric constant.

21 Now, there's two things about this.
22 It's going to cost more than PCB. It is going to be
23 a lossy-type fluid.

24 Q. A what?

25 A. Lossy, L O -- it's going to have dielectric

1 losses higher --

2 Q. Okay.

3 A. -- than one wants to deal with.

4 Now, this was submitted to the General
5 Electric Company and other people. And the response
6 was along this line -- you are aware nothing is
7 going to fly in this business unless G.E. adopts
8 it. We can assume this.

9 Their reaction to this was: "We have
10 enough trouble with lossy dielectrics that we are
11 already trying to find as replacement for PCB, and
12 we object to this for that reason." They were not
13 interested. It did not go commercial.

14 Now --

15 Q. Could it have been used as an alternative
16 capacitor fluid in capacitors that were then being
17 filled with PCB's?

18 A. Could it have been?

19 Q. Yes.

20 A. Dr. Munch, in his laboratory, made
21 capacitors that he thought were all right.

22 Q. They worked?

23 A. It could -- they worked, granted.

24 Q. The problem was that you couldn't get G.E.
25 to buy --

1 A. To use it.

2 Q. -- to buy this fluid instead of PCB's?

3 A. Yes. Or instead of other things, what
4 they're using now.

5 Q. Were you ever involved in any discussions
6 about simply ceasing to sell PCB's so that G.R.
7 would use other fluids?

8 A. Not in those terms, no, if I understand
9 what you said. I'm not sure I did.

10 Q. Well, let me make it --

11 A. Let's explore what you want.

12 Q. Let me make it clear.

13 A. Yes.

14 Q. Surely.

15 G.R., as I understand what you're
16 telling me, basically said, "I'd rather buy your
17 PCB's than this alternative that Dr. Munch has come
18 up with."

19 A. No, I'm not saying that at all.

20 Q. Okay.

21 A. What I said -- and their laboratories were
22 closed doors at this point in time. They said, "We
23 all" -- "are already working with Jossey dielectrics
24 as a possible replacement."

25 I know what they had in mind. They

1 had in mind phthalate ester, specifically dioctyl
2 phthalate, which they were working on. And they
3 began the life test in 1972.

4 And I guess we're in that framework of
5 time, somewhere around there.

6 Now, they had come to Monsanto and
7 asked Monsanto to supply dioctyl phthalate. Prior
8 to that and along at this point in time, Monsanto
9 had sampled G.E. with Santisizer 711. Now, to make
10 this simple, Santisizer 711 is a phthalate ester
11 just like DOP is a phthalate ester.

12 You don't want the whole explanation,
13 is that why you're smiling?

14 Q. No. Go ahead.

15 A. I don't know what to say.

16 Q. No. No. Just go ahead. You're -- you're
17 explaining. Go ahead and finish explaining.

18 A. Well, do you want the explanation?

19 Q. Yes. Absolutely.

20 A. Really?

21 Q. Yes.

22 A. I thought you were -- started smiling --

23 Q. No.

24 A. If you're sincere, I'll take the time.

25 Q. Go ahead and explain it.

1 A. All right. Monsanto had Santisizer 711,
2 and that's a phthalate ester with a -- one chain of
3 seven carbons and another chain of 11 carbons.
4 Dioctyl phthalate has one chain of eight carbons and
5 another chain of eight carbons. Both are phthalate
6 esters. You can't -- they're like two peas in a
7 pod.

8 We offered Santisizer 711 to G.E.,
9 which we made. We weren't making DOP. Later they
10 would ask us to do so. We didn't.

11 But they did not accept Monsanto's
12 711. The reason: It was a tick worse on dielectric
13 constant, not a great thing. It cost more. And
14 that is important.

15 The other thing is they knew they
16 could get DOP on -- on the market, like a commodity,
17 rock and gravel. And this is what they were looking
18 for. Both products had the same limitations of
19 being an ester, subject to hydrolysis and
20 oxidation. So, why should they go with what
21 Monsanto offered?

22 They were looking at DOP, and this was
23 in this time frame.

24 Q. You were offering them alternatives in the
25 1971 time frame?

1 A. To PCB, yes. And this isn't the only
2 alternative that was offered. Another alternative
3 was another hydrocarbon, which was later adopted,
4 that type thing, by Westinghouse, which they had
5 researched probably prior to this time we had
6 sampled.

7 You can say, "Well, why didn't they
8 adopt that?" Well, ours -- I'm talking about
9 isopropyl biphenyl -- ours was more expensive than
10 they felt their economics -- they adopted
11 eventually -- my understanding, they now use
12 something coming from this area, a hydrocarbon,
13 quote, "isopropyl biphenyl." They call it that.
14 It's an off-stream from a petroleum hydrocarbon.

15 And the point to all of this is -- and
16 I want to make it -- the time that PCB manufacture
17 terminated was the exact time when G.E. went to
18 market with dioctyl phthalate. Monsanto always said
19 as soon as anyone -- we, anyone -- on the outside
20 has a substitute, out; because the company was
21 ordered to shut down. The only reason they were
22 making it was because of the insistence and the plea
23 of the electrical industry and the EPA.

24 Q. When -- when had Monsanto decided that it
25 would stop producing PCB's as soon as there was an

1 alternative?

2 A. As soon as there was an alternative and
3 G.B. stopped buying PCB, that was the end of it.

4 Q. Well, let me -- let me separate those two
5 apart for just a second.

6 Are you telling me that by 1970
7 Monsanto was committed to stop selling PCB's as soon
8 as there was an alternative product for use in
9 capacitors and transformers?

10 MR. CRAWFORD: If you know.

11 A. It --

12 THE WITNESS: I do know.

13 A. You've asked the question. To my
14 knowledge, this is it: The very top of Monsanto --
15 and this is in response to the YUSHO thing.

16 Q. (By Mr. Lacey) YUSHO, you're talking about
17 the Japanese --

18 A. Yes.

19 Q. -- incident?

20 A. When they shut down in Japan, that meant
21 our plant shuts down in Japan, too, not only the
22 Japanese.

23 Q. When did that happen?

24 A. It -- it was around 1968 or somewhere in
25 that period.

1 Q. So, Monsanto's PCB plant in Japan was shut
2 down in the late Sixties?

3 A. Oh, yes.

4 Q. Okay.

5 A. I would say so.

6 Q. Okay.

7 A. It never really got going, because I was
8 sent over there to try to market and had no success.

9 Q. And shortly after that, the Japanese --

10 A. They had no time for the Japs to life test
11 and all that. And shortly after it, boom, the
12 emperor -- you know, they shut down their own place,
13 they're going to shut us. There's no point in our
14 trying to fight the emperor of Japan.

15 Q. Okay.

16 A. Now, let's get back here. The YUSHO thing
17 is the thing of very pronounced influence on PCB.
18 I'm not saying it was fully understood. It was a
19 marked influence.

20 The directive, as I understand this --

21 Paul Benignus speaking -- we are making something
22 that is not wanted. Simple to understand?

23 Q. Yes.

24 A. Get out.

25 Now, Monsanto proceeds to do this. It

1 wasn't difficult in the nonelectrical because there
2 were substitutes - or substitutes could easily be
3 provided.

4 In the electrical industry -- and the
5 reason I'm telling you this -- I got a phone call
6 from G.E. "Do not let Monsanto take precipitous
7 action to shut us down as has been already done in
8 nonelectrical."

9 My response to this is: "I know what
10 it means. You don't have to tell me that it runs
11 the risk -- if you can't get PCB's for capacitors
12 and transformers, you're going to say it's going to
13 run the risk of shutting down power supplies." And
14 I believe it would have. It would have been a very
15 serious thing to do.

16 They did not have a fire resistant
17 replacement. We know this. We're talking here
18 about efforts to find replacements. None of these
19 were fire resistant. Now -

20 Q. The replacements they ultimately used
21 weren't fire resistant, either, were they?

22 A. That's true, too.

23 Q. Okay. Go ahead.

24 A. Now, they pleaded, "Don't shut down. Don't
25 shut us off."

1 I said, "You're talking to the wrong
2 guy. You better get your very top people and come
3 into St. Louis and talk to the very top people at
4 Monsanto."

5 This actually happened. This, they
6 did.

7 Q. Who did they talk to?

8 A. They're not speaking only for themselves.
9 They're speaking for the industry. And because of
10 this, and the Government, also -- I'm saying the
11 EPA -- it's my understanding that the EPA also said,
12 "Look, if this means shut down power supply in this
13 country, you're going to have to find some way to
14 proceed without doing that."

15 Then comes this situation: Agreement
16 by all concerned to proceed on the premise that
17 capacitors and transformers are hermetically
18 sealed. And they continued to supply, pending a
19 replacement.

20 Now, Monsanto had these things. There
21 were other things. None of them flew for us. And,
22 as I say, when the shutdown really came was when
23 G.E. announced and did go to market with DOP. And
24 that's the end of it and the answer to it.

25 Q. Okay.

1 A. That's the sequence of it.

2 Q. So, when G.E. said, "We're no longer going
3 to need -- need PCB's. We no longer" --

4 A. That was the end of it.

5 Q. -- "want to buy them," then Monsanto said,
6 "We're going to shut down production"?

7 A. That's my understanding of it.

8 Q. Okay. And the very products that were used
9 in capacitors and transformers in lieu of PCB's were
10 already available in 1970, weren't they?

11 A. Yes, they were.

12 Q. Okay.

13 A. Yes, they were.

14 Q. And had Monsanto stopped making PCB's in
15 1970, the transformer and capacitor people would
16 have gone to the very products they eventually did
17 go to in lieu of PCB's?

18 A. This isn't exactly right. No, I don't
19 agree with this.

20 Q. What would they have gone to?

21 A. They -- well, all right. You're thinking
22 this through for yourself, and I don't mean to get
23 into a debate on this subject.

24 Q. I just want to know your testimony.

25 A. I agree DOP was available. I agree that

1 isopropyl biphenyl was available. I disagree with
2 your thinking -- because there is a big void in what
3 you are saying because these things were not tested
4 and probed and proved out -- that it would be
5 feasible, safe to go to market with DOP.

6 If you think it was an easy thing to
7 determine this, I assure you it was not. And after
8 DO -- G.E. did go to market with DOP and Monsanto
9 shut off -- did stop producing PCB, I can assure you
10 there were some companies flat on their face because
11 they were not able -- they no longer had the PCB.
12 They had nothing. And that was a very difficult
13 situation. We -- we were called things that weren't
14 too nice.

15 Q. I see. Isn't it a fact that the decision
16 of Monsanto to keep manufacturing PCB's after it had
17 alternative products and others had alternative
18 products available was influenced by the fact that
19 Monsanto made a lot of money selling PCB's?

20 A. No, it was not. No, sir.

21 Q. Had nothing to do with it?

22 A. No, sir, it had nothing to do with it.

23 Q. Okay.

24 A. No, sir, it did not.

25 Q. Let me ask you about your work with the

1 American National Standards Institute Committee
2 C-107.

3 A. Yes. This -- now, you're up to 1970.
4 Well, that was published in '72 or '73. There
5 was

6 MR. CRAWFORD: Let -- let him ask you
7 a question so we can --

8 THE WITNESS: I thought he did.

9 MR. CRAWFORD: Well, he's got a
10 document there that he'll probably want to ask you
11 about.

12 Q. (By Mr. Lacey) You were the chairman of
13 the steering committee on the --

14 A. This is what I was going to say.

15 Q. Okay. Tell me about that.

16 THE WITNESS: Now I -- now should I
17 proceed?

18 MR. CRAWFORD: Well, yes.

19 Q. (By Mr. Lacey) Yes.

20 A. I hate to take the time. We're going to
21 have to go soon.

22 MS. OLSEN: That's the problem.
23 There's a half hour. We don't know how much more
24 you want him to do and --

25 MR. LACEY: Well, I don't know if

1 we're going to make it or not. All we can do is I
2 can ask the questions and he can answer them and
3 we'll see if we get through it all. I don't know
4 what to do.

5 MR. CRAWFORD: Okay. Let's go.

6 MR. LACEY: I'm asking them.

7 A. I was elected to be chairman. Now, as I
8 already told you, I was on the shelf at this time.

9 Q. (By Mr. Lacey) Okay.

10 A. Except I did know people. The transformer
11 makers and the capacitor makers, I knew those people
12 through the years.

13 Q. Were you an influential person with those
14 people?

15 A. They didn't dislike me, let me say.

16 Q. Okay. What you -- what you had to say --

17 A. They knew me. And I was used to organize
18 this thing. Al Salazar at ANSI had the Government
19 backing, the funds and support; but he didn't know
20 who to invite. I knew this. And, so, we drew up a
21 list of people who should all be invited. And this
22 was very broad representation.

23 Q. Now, Mr. Salazar was with the National
24 Electrical Manufacturers Association, correct?

25 A. But he was also secretary of -- he was also

1 with ANSI.

2 Q. Okay.

3 A. On this -- in this area and in some in
4 some other areas.

5 Q. Now, the National Electrical Manufacturers
6 Association is a trade organization of people; like,
7 Westinghouse and General Electric and Allis Chalmers
8 and Maloney and others?

9 A. Yes. Whereas ANSI is really -- represents
10 Government, organizations, and everybody, the FDA
11 and the Bureau standards and the EPA and the --
12 the -- everybody --

13 Q. Okay.

14 A. -- industry, institutionals, universities,
15 and so on and so forth. Yes, this is correct.

16 Q. Now, the -- this steering committee for the
17 ANSI C-107 group, you actually chaired that
18 committee, didn't you?

19 A. This is what you're reading; so, yes.

20 Q. I mean, is that accurate?

21 A. They called me -- oh, no. I was chairman
22 of the steering committee.

23 Q. Yes.

24 A. Excuse me. Yes. That, yes.

25 Q. And what did that involve?

1 A. As I already said, as chairman of the
2 steering committee, I participated there in getting
3 this thing organized and getting it together on
4 behalf of Al Salazar, to get this thing going.

5 Q. Now, the actual chairman of the committee
6 as it final wound up --

7 A. Right.

8 Q. -- was Mr. Pappageorge, wasn't it?

9 A. You're right.

10 Q. So --

11 A. Not me.

12 Q. So, a Monsanto man chaired both the
13 steering committee --

14 A. You are right.

15 Q. -- and the committee?

16 A. But the guy -- okay. Let's let the glory
17 to the -- you're right.

18 Q. What?

19 A. You're right but I told you that I was on
20 the shelf and Pappageorge was put in there as
21 chairman. He didn't do the active work, I assure
22 you.

23 Q. Who did the active work?

24 A. Well, the composition of these are given
25 in -- in those brochures there.

1 There was a separate group for
2 capacitors. Why? Because they were capacitor
3 people and knew what they could do in the capacitor
4 area.

5 There was a separate section. They
6 were transformer people they knew. We didn't have
7 carpenters or bricklayers or so forth. We asked the
8 EPA and people like that to participate. They
9 didn't know what to do but they were invited and
10 they attended meetings, yes.

11 Q. Now, you and Mr. Pappageorge were on both
12 the transformer committee and the capacitor
13 committee, weren't you?

14 A. Oh, as -- as exofficio, is it, there,
15 you're right.

16 Q. What does "exofficio" mean?

17 A. I don't know. I don't know.

18 Q. Did -- did you get to participate in those
19 meetings?

20 A. I walked around while these guys were
21 working.

22 Q. Let me show you --

23 A. I went from one room to the other.

24 Q. Let me show you a Document 020021. And
25 this has got the actual members on those

1 committees

2 A. That's what I was talking about.

3 Q. -- doesn't it?

4 A. Yeah. Yes.

5 Q. Now, were there any representatives of the
6 EPA on those committees?

7 A. This is what I already said. EPA was
8 invited to participate.

9 What would the EPA do? The EPA did
10 attend the meetings; but when it comes down to
11 working out the nitty gritty, we couldn't get an EPA
12 guy in there. We asked EPA to attend all of our
13 meetings.

14 Q. Uh-huh.

15 A. And if you want to get into that, we'd meet
16 in -- in Chicago with the EPA; and the next time
17 you'd meet in Cincinnati with a different EPA man.
18 We met in Washington at Gathersberg and so on.
19 It -- we asked these people.

20 Q. My point is that these committees were
21 really made up of two Monsanto people and, with the
22 exception of one representative from the Department
23 of Army on the transformer group, the transformer
24 and capacitor manufacturers, weren't they?

25 A. Excuse me for laughing. And you're going

1 to say this is self-serving.

2 Q. I'm just asking who -- what people were on
3 the committees.

4 A. As you see it right there. You're right.

5 Q. Okay.

6 A. This is correct. I tried to say how
7 come --

8 Q. Well, how did it wind up like that, that --

9 A. Well, I said the people on the capacitor
10 group were people knowledgeable with capacitors; and
11 the people on transformers, they were knowledgeable
12 with transformers.

13 Q. I mean, I note in reviewing this document
14 that it appears that there were people from the EPA
15 and --

16 A. Yeah.

17 Q. -- the REA and the TVA and others that were
18 on these committees, but they didn't get involved in
19 the working groups.

20 A. They didn't want to work. They didn't know
21 what to do.

22 Q. Okay.

23 A. That's -- that's all. But they were on the
24 committee.

25 Q. Okay. Now, the National Electrical

1 Manufacturers Association came out with their own
2 standards --

3 A. Yes, they did.

4 Q. -- for the handling of PCB's in
5 transformers, did they not?

6 A. Yes, they did.

7 Q. Now, did Monsanto have a role in being
8 involved in the development of the National
9 Electrical Manufacturers Association standards?

10 A. From the standpoint that those NEMA people
11 are the same people that -- that I think you find
12 there on the ANSI thing, it's -- I -- it's difficult
13 for me to separate these two. I get mixed up with
14 it myself.

15 Q. They're pretty closely related --

16 A. Oh, absolutely.

17 Q. -- the industry trade group and the ANSI?

18 A. Absolutely.

19 Q. Almost one and the same?

20 A. Yes.

21 Q. Okay. The --

22 A. The one is dated '72, and I think the other
23 one is dated '73 and --

24 Q. I think it's '73 and '74.

25 A. Excuse me. Okay.

1 Q. It appears that -- let me show you the NEMA
2 standards --
3 A. Yeah.
4 Q. -- the National Electrical Manufacturers
5 Association. It's Document 764 through 816. It
6 appears they came out in January of 1973.
7 A. All right.
8 Q. And then the ANSI standards, the C-107,
9 apparently came out in January of 1974.
10 A. Yeah.
11 Q. And that's Document 728 through 763.
12 A. Oh-huh, right. Okay.
13 Q. Now, those standards, both the National
14 Electrical Manufacturers Association standards and
15 the American National Standards Institute
16 standards -- and both of those were prepared by
17 these groups that basically were comprised of
18 industry people and Monsanto --
19 A. Yes.
20 Q. -- those standards were very similar to
21 each other, were they not?
22 A. Oh, they are.
23 Q. Almost identical?
24 A. They are.
25 Q. Yeah. Those standards are considerably

1 different than the standards that the RPA came out
2 with on behalf of the Government, are they not?

3 A. You're in an area now where I was out of
4 the picture.

5 Q. I see.

6 A. I cannot answer this. I don't know.

7 Q. Well, are you aware of the fact that when
8 the Government took action its action was much --
9 more similar to that of Japan than to what these
10 industry groups did?

11 A. I didn't know that, no.

12 Q. Okay. You aren't aware of the fact that
13 the Government banned the manufacture of PCB's?

14 A. In Japan?

15 Q. No. In the United States.

16 A. In the United States, banned it, yes. That
17 came a little later than '77. '79, as I remember.
18 Is that right?

19 Q. It was effective '79 --

20 A. Effective --

21 Q. -- but the decision was made and
22 legislation passed in '76, wasn't it?

23 A. I accept what you say.

24 MR. CRAWFORD: Well, if you know, tell
25 him.

1 A. I don't know.

2 Q. (Ry Mr. Lacey) Okay.

3 A. I was retired.

4 Q. Okay. You do recognize that the Government

5 action was considerably different than what both the

6 National Electrical --

7 A. No, I don't.

8 Q. Okay. Did either the National Electrical

9 Manufacturers Association or the American National

10 Standards Institute recommend that PCB's be banned

11 from use as dielectrics?

12 A. I -- I don't know. I was -- I wasn't in it

13 at that time, to my knowledge.

14 Q. Weren't you on these committees --

15 A. Oh.

16 Q. -- when these reports were written?

17 A. All right. I think you are correct. I

18 think I've heard what you've said.

19 I think, if you want a short answer, I

20 would have to say "no." That is the answer.

21 Q. Okay. What the industry recommended and

22 what the Government did were very different.

23 Industry said keep on using PCB's and the Government

24 said stop.

25 MR. CRAWFORD: Well, what time frame

1 are you talking about?

2 A. Well, depending on what time frame you're
3 talking about.

4 Q. (By Mr. Lacey) Well, the industry was
5 saying from 1970 on, "Keep on using them. We've got
6 to have them"?

7 A. Yes, until they find a substitute.

8 Q. Do these documents say anything about
9 looking for a substitute for PCB's?

10 A. That wasn't the subject of these
11 documents. The subject of these documents is to try
12 and see how to prevent contamination of the
13 environment with PCB's.

14 Q. I see.

15 A. That is what these documents are addressed
16 to. The -- the purpose of these documents was not
17 to find a substitute. The purpose of these
18 documents is to try and specify standards as to how
19 to prevent contaminating the environment, obviously,
20 in the continuation of -- of PCB's. And this is why
21 I agree with what you've said.

22 Q. In fact, wasn't it Monsanto's position that
23 it would be appropriate to continue to manufacture
24 and use PCB's in the dielectric area because
25 Monsanto was going to ensure that the products

1 didn't get out into the environment from their
2 plants and to refuse to sell PCB's to anybody who
3 let PCB's get out into the environment from their
4 plants?

5 MR. CRAWFORD: IF you know.

6 A. I don't know, no, on that one.

7 Q. (By Mr. Lacey) I see.

8 A. You ought to check with somebody else.

9 Q. I see. Well, let me show you again
10 Document 20021 through 20039 and direct your
11 attention to Page 20026 and -27.

12 A. Okay.

13 Q. That's the steering committee statement on
14 PCB's, is it not?

15 A. I would assume so, yes. That's what it
16 says.

17 Q. You were chairman of that steering
18 committee?

19 A. Yes.

20 Q. Okay. And down here in Item No. 4 it says
21 that "Strict and effective steps have been taken to
22 avoid introduction of PCB's into the environment at
23 Monsanto's plants" --

24 A. Yes.

25 Q. -- "and by the facilities used where

1 Askeral-type transformers and capacitors are made."

2 A. This is correct. This is what it says.

3 Q. Okay. The position that was being taken by
4 this group was that PCB's weren't going to be an
5 environmental problem when used in the electric
6 industry because the manufacturer, Monsanto, and
7 Monsanto's customers were going to ensure that they
8 didn't get out in the environment; is that correct?

9 MR. CRAWFORD: Well, that's his
10 characterization. Be sure you understand.

11 A. I did not write this. I signed --

12 Q. (By Mr. Lacey) Who wrote that?

13 A. My name is on here.

14 Q. It was ghost-written for you?

15 A. I did not write this.

16 Q. Who wrote it?

17 A. I don't know. But --

18 Q. Well, why is your name on it?

19 A. My name was used in many ways.

20 Q. Well, did you approve the documents that
21 used your name before they went out?

22 A. In essence, I would have to say, yes.

23 Q. Okay. So --

24 A. Yes, in essence.

25 Q. So, the position that the steering

1 committee was taking was that PCB's weren't going to
2 be an environmental problem in dielectric use
3 because Monsanto, as the manufacturer, and the
4 people to whom Monsanto sold, as the actual builders
5 of capacitors and transformers, were going to take
6 the necessary steps to keep them from getting out
7 into the environment?

8 MR. CRAWFORD: Well, I will state that
9 it states what their purpose is in the -- he's read
10 it and that that ought to stand for --

11 Q. (By Mr. Lacey) And isn't -- isn't that
12 what -- isn't that, in sum, exactly what you were
13 stating?

14 A. That's what it states in here, yes.

15 Q. Now, do you know whether or not, in truth
16 and in fact, all of the people to whom Monsanto sold
17 PCB's actually handled them in such a way as to keep
18 them from getting into the environment?

19 A. No, I do not. I do not.

20 Q. Would that make any difference to you as
21 the chairman of the steering committee, signing a
22 document like that?

23 A. Effort was made, as it says here, to
24 prevent spills into the environment. That was not
25 fully achieved.

1 Q. Okay. And would it make any difference to
2 you, as the person signing that, that that wasn't
3 actually achieved?

4 A. Yes. In full conscience, yes.

5 Q. Okay. Did Monsanto take any steps, as the
6 manufacturer of PCB's, to exercise whatever power it
7 had to ensure that its customers didn't allow PCB's
8 to be a problem?

9 A. They did everything they could, yes.

10 Q. What did they do with their customers who
11 weren't handling PCB's properly?

12 A. I don't know. You would have to check with
13 the marketing -- with the person -- the business
14 director.

15 Q. Well, then, how can you say they did
16 everything in their power if you don't even know
17 what they did?

18 A. All right. Then I'll withdraw what I said
19 and say check into this with the top of the
20 business, which I was not.

21 Q. Well, would you agree with me that Monsanto
22 should have done everything in their power to try
23 and ensure that their customers didn't let PCB's get
24 into the environment?

25 A. I agree with that.

1 Q. Okay. Now, what strategy did Monsanto
2 follow, from its own corporate standpoint, with
3 regard to responding to the PCB problem?

4 MR. CRAWFORD: If you know.

5 A. I cannot answer that myself, no. I
6 wasn't -- I was -- as I already told you, I was on
7 my way towards retirement. They didn't call me in
8 on these things.

9 Q. (By Mr. Lacey) Okay. Okay. Let me show
10 you a document here. It's part of a larger package,
11 but the actual document begins at 8935 and continues
12 through 8947. It's a memo dated March 22nd, 1972 --

13 A. Yes.

14 Q. -- from Dr. Munch to Mr. Gossage, with a
15 copy to you, is it not?

16 A. Yeah, I'm copied in here.

17 Q. Did you see that memo and the attachments
18 to it?

19 A. What was the date on this?

20 Q. March 22nd, 1972.

21 A. If I was in the country, I saw it; and I
22 would have received it. I'm was on here; so, I
23 assume, somewhere along the line, I received it.

24 Q. And this document set forth the strategy
25 with regard to dielectrics and PCB's?

1 A. Yes.

2 Q. Okay.

3 A. I understand this.

4 Q. Okay.

5 A. Correct.

6 Q. Now, are you telling me you didn't have any
7 part in formulating that strategy?

8 A. No, I did not.

9 Q. Okay. You just got copied on it so you'd
10 know what it was?

11 A. I got copied on it, yes.

12 Q. Okay. And Dr. Munch would be more familiar
13 with what the actual strategy --

14 A. He wrote it.

15 Q. He wrote the corporate strategy?

16 A. Well, he wrote the -- this -- this -- I
17 don't know if he's transmitting what was written by
18 someone else.

19 "The attached has" -- it says
20 "**strategy**" -- "strategy has been revised on the one
21 sent with my memo of March 17th."

22 Something was -- was revised, and he
23 sent this to Gossage. Gossage is the one you
24 should --

25 Q. Mr. Gossage would be able to talk --

1 A. Yes.

2 Q. -- to us about that?

3 A. Yes.

4 Q. Okay. Let me show you another document,

5 8763 through 8765, dated June 22nd, 1971. Is that a

6 document that you wrote?

7 A. Yes.

8 Q. And you wrote it to --

9 A. I think so.

10 Peter Marsh in -- in Brussels.

11 Q. Okay. And you copied a number of people

12 about that document, correct?

13 A. Copied in a number of people, right.

14 Q. Including Mr. Gossage?

15 A. Yes.

16 Q. Dr. Munch?

17 A. Yes.

18 Q. Dr. Richard?

19 A. All these here.

20 Q. Does this describe the information that you

21 acquired regarding PCB's and the sales prospects for

22 Askarels?

23 A. This is what it discusses, yes. This deals

24 with railroad transformers.

25 Q. And the replacement of PCB's as the fluid

1 in them?

2 A. A change -- what I've read so far is -- is
3 to replace Aroclor 1260 with 1254. That's not
4 replacing PCB's. It's replacing one PCB with
5 another PCB. 1260 is hexachlorobiphenyl. This is
6 pentachlorobiphenyl.

7 Q. Okay.

8 A. So, it's replacing one with another.

9 Q. All right. In the third paragraph, there's
10 a discussion to -- a reference to a discussion you
11 had with General Electric's Washington, D.C.,
12 people --

13 A. Uh-huh.

14 Q. -- about Representative Ryan's bill.

15 A. Uh-huh.

16 Q. What's that all about?

17 A. Ryan was a congressman.

18 Q. And what bill was that?

19 A. I don't know. This was something in
20 Congress, had to do with the House of
21 Representatives. It was Representative Ryan.

22 That was a name that kept cropping up.

23 Q. But you don't know why?

24 A. Yes. It kept cropping up in this -- this
25 area of -- of PCB and environmental -- Ryan was a

1 name that kept cropping up. He was quite active
2 in -- in this area of the environmental thing.

3 MR. CRAWFORD: David, how are you
4 doing? We're right on 5:00 o'clock.

5 MR. LACEY: I'll guess maybe 20
6 minutes. That would be my guess.

7 MR. CRAWFORD: That would be 5:30.

8 THE WITNESS: We can't do that.

9 MR. CRAWFORD: No.

10 THE WITNESS: No, we can't do that.

11 MR. CRAWFORD: No.

12 THE VIDEOGRAPHER: I'm ready.

13 MR. CRAWFORD: What do you want to
14 do? Have you got another ten minutes or something
15 so we can make that plane?

16 MR. LACEY: All I can do is just keep
17 on going till you say we need to stop and then we
18 can try to conclude this at some point. We're
19 close.

20 MR. CRAWFORD: Yes.

21 MR. LACEY: But I don't -- you know, I
22 don't know whether we'll make it in ten minutes or
23 not.

24 MR. CRAWFORD: Okay. Well, let's give
25 it another ten minutes --

1 THE WITNESS: All right.

2 MR. CRAWFORD: and then we

3 better --

4 THE WITNESS: I don't want to closely

5 miss my plane.

6 MR. CRAWFORD: Okay.

7 MR. LACEY: Your flight is back to

8 St. Louis?

9 MR. CRAWFORD: Yes.

10 THE WITNESS: Yes. Yeah.

11 MR. LACEY: Is that the last flight

12 out this evening?

13 MR. CRAWFORD: That's the problem.

14 THE WITNESS: Yes.

15 MR. LACEY: Last flight out of Hobby?

16 MR. CRAWFORD: I don't know if it's

17 the last flight. I assume --

18 THE WITNESS: It's the last flight. I

19 looked into that because I was originally set up to

20 do -- let's not get into --

21 MR. CRAWFORD: Okay.

22 THE WITNESS: You're not going to

23 bring that up to me, are you?

24 MR. LACEY: I guess we'll let that --

25 we'll not worry about the plane.

1 THE WITNESS: What a deal.

2 Q. (By Mr. Lacey) The discussions on the memo
3 that you wrote about -- or to Mr. Marsh --

4 A. Marsh, yes.

5 Q. -- about the discussions you had with the
6 various G.E. people, did that accurately summarize
7 the various discussions you had with General
8 Electric about replacements for PCB's?

9 A. I haven't read it. I don't know.

10 Q. Yeah, I know.

11 A. But I wouldn't mislead -- now, we're --
12 we've got a --

13 Q. Well, why don't you take a minute to review
14 that?

15 It's important to me that I know that
16 that is what you recall G.E. having informed you.

17 A. Yes, I would not have generated this kind
18 of information myself, unilaterally. I -- I
19 wouldn't have been able to. This is -- why buy a
20 dry-type, expensive fuse?

21 This is passing along information that
22 was given to me. I -- I don't -- the -- the whole
23 thing was of no importance that I know of.

24 Q. Of no importance?

25 A. No. Not that I know of, no.

1 Q. I see.

2 A. It may sound that way, but it actually
3 wasn't.

4 MR. CRAWFORD: Have we identified that
5 with a number?

6 THE WITNESS: I don't know.

7 MR. LACEY: Yes. We previously have.
8 It's 8763 through 8765.

9 A. Nothing happened as a result of that, I
10 assure you.

11 Q. (By Mr. Lacey) Okay. You were still
12 interested at this point, even to the extent you had
13 been put on the shelf, in trying to keep people
14 advised of potential opportunities for further sales
15 of PCB's

16 A. I would say this.

17 Q. -- even though you understood that it was
18 the intention of Monsanto at this time to stop
19 making PCB's as soon as replacements could be found?

20 A. Yes, I would have to say this.

21 Q. You're still looking for markets in the
22 meantime?

23 A. Well, I told you this doesn't amount to
24 very much. IF -- IF -- IF you interpret this as a
25 significant thing, all right. I have to go with

1 what the -- what is said in there.

2 Q. Well, I'm just trying --

3 A. I didn't ignore what -- what was given me.
4 It has to do with electric train transformers, I
5 believe.

6 Q. Well, there are discussions in there about
7 the prospects for selling PCB's to China, a need for
8 PCB's in Russia - aren't those things discussed
9 there?

10 A. I didn't read that.

11 Q. Well, maybe we ought to step back and just
12 look at it again. I -- let me show you the --

13 A. In this thing --

14 Q. -- the third page.

15 A. -- to Marsh?

16 Q. Yes. Here -- here's the memo. It has Page
17 1, Page 2, Page 3. You're talking about here China
18 is going to probably need considerable Arcelor for
19 capacitors. The Russians, who have two plants, have
20 need for 5,000 tons per year.

21 A. I was passing along information that I
22 picked up somewhere.

23 Q. Now, why did you think that information
24 would be of interest to Monsanto since you
25 understood they had already made the decision to

1 stop selling PCB's as soon as their customers could
2 switch over?

3 A. Nobody had a replacement for PCB.

4 Q. Well, you were talking about --

5 A. This -- this ties in, as I understand it,
6 with Europe, international -- Marsh is in Europe.
7 Their posture on PCB -- I don't know the date of
8 this thing right now -- was considerably different
9 from the posture here in the States.

10 Q. I see. So, Monsanto only was going to stop
11 selling PCB's in the United States. They were going
12 to keep on selling them overseas?

13 A. The French were going to, the Germans and
14 so forth --

15 Q. And Monsanto was, too?

16 A. -- and the Russians.

17 Pardon?

18 Q. And Monsanto was, too?

19 A. When Monsanto shut down here, that
20 automatically shut it down in -- in Britain. That
21 is what happened.

22 Q. I see. But in the meantime, in Europe and
23 other places, Monsanto was going to try to continue
24 to sell PCB's?

25 A. In Europe, yes. Yes. Because the posture

1 there was considerably different than it was here.

2 Q. Were you involved at all in monitoring the

3 actual sales by Monsanto of PCB materials, in

4 determining what was profitable and what was not?

5 A. No. I think now you're getting in an area

6 that involves other than dielectric.

7 Q. Well --

8 A. You're talking about the broad area.

9 Q. Okay. And you weren't involved --

10 A. No, I was not in that.

11 Q. Even though from 1971 on Monsanto, at least

12 in the United States, was limiting its sales to

13 dielectric uses?

14 A. Yeah, that -- that's right.

15 Q. Do you recall any time when Monsanto was

16 having trouble selling its Aroclors because the

17 quality of its product was not as good as that of

18 its competitors?

19 A. No. Who are its competitors?

20 Q. Well, weren't there other people around the

21 world who were making PCB's at some point in time?

22 A. Oh, yes. No, I thought you were talking --

23 oh, you're -- you're into ex U.S.

24 Q. I'm asking whether or not you recall a

25 period of time when Monsanto's production of PCB's

1 was not as good a quality as that of the Japanese
2 and the Germans, for example?

3 A. No. No, absolutely not.

4 Q. It was always superior?

5 A. I don't say it was "superior." It was
6 equivalent. I -- I say their quality, as far as I
7 know, was and could have been equivalent.

8 This comes back to setting these
9 international standards that I worked on. That was
10 the purpose for it, to have uniformity of quality.

11 Q. And you don't -- you don't recall at any
12 point in time the United States' plants or Monsanto
13 in the United States being concerned that its PCB's
14 were not as good a quality --

15 A. No, no, no. Not at all.

16 Q. Okay.

17 A. No.

18 Q. If that happened, would that be surprising
19 to you?

20 A. Oh, it would.

21 Q. Okay. Some of these Askarels, or PCB's,
22 used in transformers and capacitors had other
23 materials added to them in addition to the PCB's,
24 did they not?

25 A. Yes.

1 Q. And were those other materials a problem of
2 having toxic effects or adverse effects on human
3 health?

4 A. Not to my knowledge.

5 Q. As far as you know, that was not the case?

6 A. No. I think you better talk to the medical
7 people on this.

8 Q. Let me show you a Document 13947. That's a
9 handwritten note dated April 5th, 1968, from an
10 R. M. McCutcheon at the Krummrich plant to you, is
11 it not?

12 A. Yes.

13 Q. And it talks about --

14 A. 1968. Oh, all right.

15 Q. -- talks about things added to PCB's --

16 A. All right. This is an added scavenger.
17 This does have toxicity, yes.

18 Q. Okay. So, some of the products that
19 Monsanto sold containing PCB's not only had PCB's
20 but also had other materials that could cause toxic
21 problems, did they not?

22 A. This is what they called a "scavenger,"
23 used in the amount of a few tenths of a percent and,
24 per se, these epoxides have their own medical
25 characteristics history, let me say.

1 And on this subject, this is something
2 for the medical people -

3 Q. Okay.

4 A. -- for Dr. Kelly.

5 Q. Do you know why a plant person was writing
6 you to tell you about that problem?

7 A. No, I don't. No, I don't.

8 Q. But you do recall that some of the
9 additives that were put in these PCB's for
10 dielectric purposes had their own additional toxic
11 problems, correct?

12 A. This is correct. Epoxides, we're talking
13 about; and this is correct. The toxicology of
14 epoxide is a separate subject, and I'm not qualified
15 to equate it.

16 Q. What sort of warnings did your group
17 provide to the people to whom you sold PCB materials
18 having these scavengers added to them? Anything?

19 A. Not as a formal program or approach, that I
20 know of.

21 You're referring to the fact of the
22 addition of this small amount of scavenger, what
23 effect that has - what bearing that has, on
24 toxicology and so forth. Not that I know of, no.

25 However, they would refer to the

1 literature on -- on these things to people using
2 them, the -- what's printed in the literature.

3 Q. The primary source of literature to people
4 about any toxicological or dermatological problems
5 with PCR's and Askeral as dielectric fluids was the
6 literature that we've already looked at, was it not?

7 A. Yes.

8 Q. Are you aware of any other literature
9 provided to customers about toxicology or hazards,
10 other than what we've already looked at?

11 A. No.

12 Q. So, as far as you know, as the person
13 designated by Monsanto to speak to advertising on
14 dielectrics, marketing on dielectrics, and technical
15 data on dielectrics, that's the sole source of
16 information supplied to customers?

17 A. As far as I know, yes.

18 MR. CRAWFORD: We better shut her
19 down.

20 MR. LACEY: Okay. Well, we'll --

21 THE WITNESS: Yeah.

22 MR. LACEY: Let me address the
23 question whether we need to complete this later or
24 not.

25 MR. CRAWFORD: Okay. Fine.

1 MR. LACEY: And we'll decide what to
2 do at future date. But, right now, we'll just leave
3 it open, subject to being completed.
4 MR. CRAWFORD: All right. Maybe we
5 can do it by phone if you don't have a lot of
6 questions.
7 MR. LACEY: Okay. We'll look at that
8 when we get there.
9 MR. CRAWFORD: Okay.
10 THE VIDEOGRAPHER: This concludes the
11 deposition of Mr. Paul Benignus. The time is 5:11.
12 MR. LACEY: You need to note it's the
13 continuation. It's not the conclusion.
14 THE VIDEOGRAPHER: Okay. It's noted.
15 MS. OLESEN: Adjourned, rather.
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SIGNATURE OF WITNESS

I, PAUL GEORGE BENIGNUS, solemnly swear or affirm, under the pains and penalties of perjury, that the foregoing pages, 168 through 446, contain a true and correct transcript of the testimony given by me at the time and place stated, with the corrections, if any, and the reasons therefor noted on a separate sheet of paper and attached hereto; and that I am signing this before a Notary Public.

PAUL GEORGE BENIGNUS

THE STATE OF _____:

SUBSCRIBED AND SWORN TO BEFORE ME, the undersigned authority, by the witness, PAUL GEORGE BENIGNUS, on this the _____ day of _____, 1987.

Notary Public in and for
The State of _____

My commission expires:

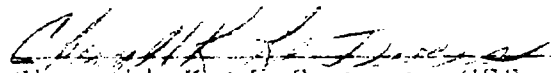
1 THE STATE OF TEXAS:

2 I, Cheryll K. LeFevers, a Certified
3 Shorthand Reporter, hereby certify that the
4 foregoing testimony was given before me after the
5 Witness had been first duly sworn.

6 I further certify that I prepared this
7 transcript and that the foregoing pages constitute a
8 complete and correct copy of the transcript of the
9 proceedings.

10 I further certify that I am neither
11 attorney for, related to, nor employed by any of the
12 parties to the lawsuit in which this deposition was
13 taken; Further, I am neither related to nor employed
14 by any attorney of record in this cause, nor do I
15 have a financial interest in the matter.

16
17 GIVEN UNDER MY HAND AND SEAL OF OFFICE
18 in Houston, Texas, on this the 28th day of April,
19 1987.

20
21 
22 Cheryll K. LeFevers, CSR, CP, CM

23 Certification Number: 1690
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

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