

1 jury a copy of one of the documents that was
2 discuss at the close of the testimony
3 yesterday, Plaintiffs' Exhibit 196. We have
4 made copies of that document so that each
5 juror and the Court may have a copy of that.

6 THE COURT: You may do so.

7 MR. LACEY: Okay. The offer begins now
8 at Page 328, Line 14.

9

10

11 (Reading from video deposition)

12 Q Let me show you another document entitled "The
13 Proper Handling of Aroclor and their mixtures in
14 the Electrical Industry," Document 1967 through
15 2051.

16 A I'm very familiar with that.

17 Q Okay. How are you familiar with that?

18 A Has my name on it.

19 Q Okay. Did you write it?

20 A I wrote it.

21 Q And what date did you write it?

22 A 12-1-54.

23 Q December 1st, 1954?

24 A Correct.

25 (End of reading)

MR. LACEY: Going to Line 12.

(Reading from video deposition)

Q Now, what was the purpose of writing this document on the proper handling of Aroclors and their mixtures in the electrical industry?

A The purpose of this was to inform our customers of the specifications of all these -- call them 'PCBs'. And you will note in here all of the test procedures, as used at -- and documented at the American Standards -- the ASTM.

So, it gives all of that in great detail. For instance, here it gives great detail of the procedure that is used in our own laboratories. And it give detail of the procedures documented ASTM out in the industry. And it goes into detail, also, also on sampling methods. Then it goes into such things as unloading of tank cars. Now, I remember this: It was sort of embarrassing. A man could come in -- would come and buy his first tank car and it would be shipped. And he would have go to the effort of building an unloading dock to receive this thing, and he built this dock -- would have built it to

1 unload from the bottom where the tank cars
2 usually do unload.

3 Q And wouldn't even know enough to know how to
4 unload the car?

5 A Wouldn't know how to unload the car. Ours
6 unload through the top. Things like this. They
7 were intended, in detail, for our customers.

8 Q Okay. So --

9 A -- of which there weren't many.

10 Q Okay. So, you'd provide a document like
11 that to General Electric and a document to
12 Westinghouse and a document to Allis-Chalmers --

13 A Exactly.

14 Q -- and those sorts of people?

15 A Exactly.

16 Q Let me look at that document with you for a
17 little bit just to go over the sorts of things
18 that are in it. It's got in here an index or
19 table of contents --

20 A Yes.

21 Q -- at the first, doesn't it?

22 A Uh-huh.

23 Q And there it details with a lot of things
24 about what it's going to cover. For example, it
25 has a chapter on unloading tank cars?

1 A Right. I saw that here somewhere, the tank
2 car unloading. All right.

3 Q It has a chapter on storage tanks?

4 A Right. We disclose the kind of storage
5 tanks we used.

6 Q Has a chapter on gas -- gasketing the pump
7 packing?

8 A Packing. Right.

9 Q Has an entire chapter on how to do a sample?

10 A Right.

11 Q An entire chapter on how do laboratory
12 analysis?

13 A Correct.

14 Q A chapter on the actual test procedures?

15 A Right.

16 Q A chapter on typical properties?

17 A Correct.

18 Q A chapter on earth treatment of Aroclor and
19 their mixtures?

20 A Right.

21 Q A chapter on dermatology and toxicology?

22 A Yes, sir.

23 (End of reading)

24

25 MR. LACEY: Going to Line 18.

1

2

(Reading from video deposition)

3

Q The chapter on tank cars, for example --

4

A Uh-huh.

5

Q -- starts off and it's got some have

6

specific directions on what to do, doesn't it?

7

A I would think so.

8

Q I mean, for example, it explains there are

9

either two or three --

10

A Yes.

11

Q -- connections on the top of the car?

12

A Right.

13

Q And exactly what size they are?

14

A It's very detailed. Right.

15

Q Exactly what pressures to use?

16

A And that information was given to me from

17

our plant.

18

Q Right. Even goes to the point of explaining

19

that the car has got to be level and the brakes

20

have got to be set before you can unload it?

21

A We know this.

22

Q Okay. So, it's very detailed with regard to

23

that?

24

A It's very detailed.

25

Q All right. And that same sort of detail

1 follows through the whole chapter, basically a
2 step-by-step how-to-do-it?

3 A Right. And that, I obtained from our plant.

4 Q Right. When we come to storage tanks --

5 A Same thing.

6 Q Same thing. Very detailed description of
7 storage tanks, exactly how they should be built,
8 exactly what materials to use and everything,
9 correct?

10 A Right.

11 Q Talks -- even has drawings on how to do it
12 and the exact sizes of the nozzles, doesn't it?

13 A It sure does.

14 Q Okay. When we get to the chapter on
15 gasketing and pump packing, it describes --

16 A A specific.

17 Q -- specific types of connections. Gives the
18 part number and the company you can get it from?

19 A That's the purpose of this.

20 Q Okay. The chapter on sampling methods,
21 again, is very specific on how you do it, is it
22 not?

23 A That's correct.

24 (End of reading)

25

1 MR. LACEY: Going to Page 335, Line 3.

2
3 (Reading from video deposition)

4 Q Then it talks about the actual test
5 procedures. These are specific procedures to
6 make sure that the electrical properties have
7 been properly maintained?

8 (End of reading)

9
10 MR. MUSSLEWHITE: Excuse me. What
11 page?

12 MR. LACEY: 335.

13 MR. MUSSLEWHITE: There's no Page 335
14 here, sir. I'm sorry. I can't read it.
15 You will have to read it.

16 MR. LACEY: The answer is, "This is
17 correct."

18 Going to Page 336 --

19 MR. MUSSLEWHITE: Okay.

20 MR. LACEY: Line 10?

21 MR. MUSSLEWHITE: Okay.

22
23 (Reading from video deposition)

24 Q In fact, in talking about the test
25 procedures here on Page 47, Document No. 2017, it

expresses you should, quote, "Danger. Make sure check knob is in the check position; otherwise, painful shock will result," close quote.

A That's right.

(End of reading)

MR. LACEY: Going to Line 23.

(Reading from video deposition)

Q Talks at another point on Page 48, No. 2018, another caution. Talks about the 500 volt D.C. charge and shock hazard that exists in handling the apparatus, correct?

A That's correct.

Q The next page it observes again, underlined, the possibility painful shock doesn't it?

A If you get a jolt of 500 volts --

Q You'll know it, won't you?

A You'll know it.

(End of reading)

MR. LACEY: Going to Page 338, Line 18.

(Reading from video deposition)

Q Then we come to the chapter on dermatology and toxicology. Now, did you write that chapter?

1 A Well, this was given to me from the medical
2 department.

3 Q I see.

4 A I did not -- I don't know what you mean by
5 "write it." Did I copy it down? Did I formulate
6 this? Did I decide what to put there? No.

7 Q Okay.

8 A I received this from the medical department.
9 I know exactly what is in here, and this is where
10 it came from.

11 Q Okay. Well, let me stop --

12 A And -- oh, I'm sorry.

13 Q I'm sorry. Go ahead. You can tell me about
14 the medical.

15 A Well --

16 Q I've got --

17 A Well, here again in this area, talk to our
18 medical people.

19 Q Okay.

20 A I gave what I received.

21 Q Now, in the other chapters -- for example,
22 how to unload a tank car, you got that from your
23 plant people, correct?

24 A Yes, I did.

25 Q And it gave step-by-step what to do, just

1 the way your plant people did it, correct?

2 A This is correct.

3 Q And on the storage tanks you got the
4 information there from your plant people and gave
5 step-by-step just how to handle the storage tank,
6 correct?

7 A This is right.

8 Q And on the section about laboratory
9 procedures, that came step-by-step from --

10 A Well, we went through the whole thing.

11 Q Yes.

12 A We're right on the entire thing there --

13 Q Yes.

14 A -- that you're talking about.

15 Q Well, let me ask my question. Now, on the
16 laboratory procedures you went step-by-step just
17 the way Monsanto did it in the laboratory,
18 correct?

19 A And as it was done by others in the field,
20 industry, yes.

21 Q Okay. And the same thing with filtering the
22 Aroclors through the earth -- step-by-step just
23 like Monsanto did it, correct?

24 A Yes. We already said all of these things.

25 Q I want to make sure that each set of

1 directions were step-by-step just like Monsanto
2 did it themselves, correct?

3 A Yes, yes.

4 Q Now --

5 A Okay.

6 Q -- my question to you is: On the
7 dermatology and toxicology and safe handling, did
8 you set out there step-by-step in detail exactly
9 how PCBs were handled in Monsanto's plants?

10 A No. I went in accordance with what was
11 given to me by the medical department.

12 Q So, that is the only portion of this book
13 that doesn't give the step-by-step handling
14 procedures the same way Monsanto did it in their
15 plants; isn't that right?

16 A Oh, it doesn't do this. This -- I have to
17 agree. I agree with you on this.

18 Q And every other portion of the book does
19 give the step-by-steps, doesn't it?

20 A Yes.

21 Q And the reason you put that in there is
22 because that is what the medical department gave
23 you to put in there?

24 A That's where it came from.

25 (End of reading)

MR. LACEY: Going to Page 343, Line 1.

(Reading from video deposition)

Q And after you got that back and put the rest of the book together, it was finally done and then provided to customers, correct?

A This is correct."

(End of reading)

MR. LACEY: Going to Line 13.

(Reading from video deposition)

Q Mr. Benignus, let me show you Document 2052 through 2138 and ask you if this isn't an updated version of your work on the proper handling of Aroclors and their mixtures in electrical industry?

A That is.

Q And this work follows the format of the original in that it has all of the detailed information in each chapter on the specific Monsanto procedures for doing everything, with the exception of the -- not having the specific detailed procedures on exactly how Monsanto

1 handles PCBs in their plant units; is that
2 correct?

3 A That's the way it reads.

4 Q Okay. And then let me show you -- by the
5 way, what was the date of that update?

6 A '56.

7 Q Okay. And why did you produce an updated
8 version in 1956?

9 A We ran out.

10 (End of reading)

11

12 MR. LACEY: Going to Line 13.

13

14 (Reading from video deposition)

15 Q Now, let me show you another Document, 2139
16 through 2252, and ask you if this is a 1960
17 update of your previous work, entitled "The
18 Proper Handling of Aroclors and their Mixtures in
19 the Electrical Industry"?

20 A Yes, it is.

21 Q And was that printed because the 1956
22 edition had run out?

23 A Sad to say, yes.

24 Q You had a popular work there?

25 A It dumb-founded me, really.

1 Q How many copies of this thing do you think
2 you got distributed between 1952 and 1956 and
3 1960?

4 A I don't know.

5 Q Quite a few of them?

6 A Quite a few.

7 (End of reading)

8

9 MR. LACEY: Going to Page 350, Line 15.

10

11 (Reading from video deposition)

12 Q Now, and again, this 1960 version, like the
13 previous two versions, had all the detailed
14 information about exactly how Monsanto did each
15 step in every chapter except dermatology and
16 toxicology, correct?

17 A This is correct.

18 Q Okay. And in that chapter on dermatology
19 and toxicology, what was supplied was the
20 information the medical department gave to you to
21 include in this work?

22 A That's the information that was available to
23 me, correct.

24 (End of reading)

25

1 MR. LACEY: Going to Line 9.

2
3 (Reading from video deposition)

4 Q Let me ask you a couple of questions about
5 some of the material in that section on
6 dermatology and toxicology.

7 A All right.

8 Q I think that the language remains relatively
9 constant through all three versions.

10 A It does.

11 (End of reading)

12
13 MR. LACEY: Going to Page 360, Line 13.

14
15 (Reading from video deposition)

16 Q Some of the transformer fluids had a mixture
17 of PCBs and chlorinated benzene; is that correct?

18 A This is correct.

19 Q And that is why you referenced chlorinated
20 benzene?

21 A This is correct.

22 (End of reading)

23
24 MR. LACEY: Going to Page 379, Line 9.

25

1 (Reading from video deposition)

2 Q Well, what about when you visited the
3 LaSalle, Illinois, Electric Utilities capacitor
4 plant? Did you go out into the area where
5 capacitors were being made?

6 A I was there in area where capacitors were
7 being made, yes. I've been there.

8 Q Did you observe anything that caused you any
9 concern about the way they were handling PCBs?

10 A I felt that their ventilation may not have
11 been all that it should be, but I wasn't there to
12 call" -- "there to call their or anything else.

13 Q Did you see --

14 A I could smell more Aroclor there at that
15 point in time than I would have expected to. You
16 realize, don't you, that you can smell Aroclor?
17 It's not without detectable odor.

18 Q What does Aroclor smell like?

19 A Aroclor has clean odor, is the best I can
20 describe this to you -- a clean odor. It has no
21 odor as perfumes or flowers or anything like
22 that.

23 Q You wouldn't use it as perfume?

24 A No, doesn't it doesn't impart that kind of
25 delicate odor. Aroclor doesn't smell bad. It

1 smells clean. May I say 'clean odor'?

2 Q This is new Aroclor?

3 A It's -- let me say it this way: The nearest
4 I can say that might be familiar to you is if you
5 go into the washroom in a public place and you
6 smell the naphthalene, okay? In other words, the
7 disinfectant. It's not an odor that upsets one.
8 It's a clean odor. And it's not a strong odor at
9 normal temperatures.

10 Q This is -- this is fresh Aroclor?

11 A Well, I don't know what you mean by 'fresh
12 Aroclor.'

13 Q Unused.

14 A I'd say unused -- I'd say -- unused?

15 Q Yes?

16 A That's true of unused; and it's true of
17 used, too.

18 Q So, even Aroclor in a failed transformer or
19 a failed capacitor is going to have the same
20 smell?

21 A Oh, now, wait a minute.

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

23 A Oh, well, now, 'failed,' you're probably
24 talking about an arcing failure of a transformer
25 or a case of a capacitor where the thing has

1 consumed itself.

2 Q What spell would Aroclor have there?

3 A In those situations -- remember, there's
4 more than PCB inside a transformer. There are
5 cellulosic materials, in the case of a
6 transformer, pressboard, wood, and things like
7 that. And if this thing has been subjected to
8 the heat one generates where there is an
9 arc-formed gas, you're going to get carbonization
10 and odor and -- and so forth that is not at all
11 normal at all. It's going to smell. You better
12 believe it.

13 Q It's going to have an unpleasant smell?

14 A Oh, yes.

15 Q Okay.

16 A And you have hydrogen chloride, yes -- very
17 pungent.

18 Q Okay. Now, this electric utilities plant in
19 LaSalle, Illinois, you did not feel that they had
20 the ventilation they should; is that correct?

21 A I said this as a general thing, yes.

22 Q Did you --

23 A Although I was not uncomfortable, but --

24 Q Did you express your concern to people there
25 at the plant, that they were not handling it

1 well?

2 A No.

3 Q You just you kept your mouth shut and went
4 on?

5 A I wasn't being asked. And after all, they
6 have been working in there day in, day out, with
7 no report of any health hazards and --

8 Q Did you ask them when you were there about
9 health problems?

10 A No, I didn't.

11 Q You just -- back at Monsanto where you
12 normally stayed, you never had heard anything
13 about a health problem there at that plant?

14 A That's right. I hadn't heard of a health
15 problem at any of these places.

16 Q But you had never gone to any of these
17 places and attempted to determine whether they
18 had any health problems?

19 A No, I didn't.

20 Q You haven't heard of them. You haven't --
21 you haven't inquired about any, either. It's
22 just --

23 A This this is correct.

24 (End of reading)

25

1 MR. LACEY: Going to Page 388, Line 18.

2
3 (Reading from video deposition)

4 Q Did you ever visit the Monsanto plants where
5 PCBs were actually produced?

6 A Yes.

7 Q Did you visit both the Anniston, Alabama,
8 plant --

9 A Yes, both.

10 Q -- and the --

11 A I've been in both plants.

12 Q -- and the Krummrich plant?

13 A Correct.

14 (End of reading)

15
16 MR. LACEY: Going to Line 21.

17
18 (Reading from video deposition)

19 Q When were you first there, the first time
20 you were describing for me -- about what period
21 of time?

22 A I would probably put this sometime in the
23 1950's. In the 1950's, sometime around there.
24 Because I should -- I would go to the laboratory
25 at the Krummrich plant, and there is where I saw

1 Aroclor used, tested, and so on and so forth. In
2 the laboratories, yes.

3 Q Did you also go out into the plant area
4 where it was being manufactured?

5 A I said yes, I was out there.

6 Q Okay. Did you observe any special
7 precautions being taken by any workmen to avoid
8 contact with Aroclors or any precautions taken by
9 Monsanto to keep the workmen from coming into
10 contact with Aroclors?

11 A I did not. I observed hard hats. I wore a
12 hard hat. I observed gloves being worn as one
13 would wear going -- wear climbing onto a tank car
14 or -- or going up iron stairs, et cetera, and an
15 iron railing, and maybe rolling some drums.
16 These gloves were not there for the purpose of
17 covering the hand skin from the Aroclor. Neither
18 did I have anything. I had goggles was -- this
19 was standard practice. I had goggles. This is
20 standard practice you go into the plant. They
21 give you protective goggles.

22 Yes, sir. I had these and the safety
23 goggles, for instance, are glasses that was a
24 requirement when you went into a chemical plant.

25 At one point in time, whether you went to

1 the PCB area or not, they would give you a smock
2 to wear, but you had that whether you went to
3 Aroclor or not.

4 Q Anything else?

5 A They wear safety shoes but not because of
6 the PCBs. They didn't want anything heavy to
7 break their toes.

8 Q You are talking about steel-toed shoes?

9 A Steel-toed shoes, yes.

10 Q Anything else?

11 A No, I would say that is it.

12 Q Did you see any changes between the way the
13 workmen were exposed or not exposed to PCBs when
14 you went back to the Krummrich plant in the late
15 '60's other than the fact it was cleaner and you
16 couldn't smell it?

17 A No, I couldn't see any difference in their
18 attire, no.

19 Q What about the Anniston, Alabama plant?

20 /When did you visit that plant?

21 A I visited the Anniston, Alabama, I would say
22 first time 19 maybe 48 or 47, something like
23 this.

24 Q What did you observe there about precautions
25 provided by Monsanto for the workmen?

1 A Essentially the same as I have just said for
2 the Krummrich.

3 Q You didn't notice any?

4 A There are no special protective. They
5 didn't wear aprons and protective garments. They
6 were attired in their khaki. The supervisor, he
7 wore a white shirt, I don't know why, and khaki
8 pants. He didn't, at times didn't wear hardhat
9 either.

10 Q Were there special uniforms that Monsanto
11 required all of its people to wear? You were
12 supposed wear a khaki --

13 A Why.

14 Q -- uniform to work?

15 A Yes. This is a thing that whether you were
16 in the laboratories or the plants, you had these
17 uniforms to wear. It was no longer that you came
18 there in your street clothes. Your wore these
19 uniforms and they were laundered by the company
20 and are furnished and laundered by the company
21 and were changed once a week or twice a week,
22 whatever. If needed, if there was spill, they
23 would be changed at this time.

24 Q Okay. So, the workmen had special clothes
25 when they came to work to change into?

1 A Yes. They didn't work in their street
2 clothes, let me say, those days were over with,
3 yes.

4 Q Okay. Any other precautions that were taken
5 with regard to exposure to PCBs?

6 A Not that I know of, no, huh-uh.

7 Q The company laundered these clothes for the
8 workmen?

9 A Yes.

10 Q You can't think of any other precautions
11 that you observed being taken by Monsanto to
12 protect its workmen from exposure to PCBs?

13 A No. I never saw anybody wear a mask or so
14 forth.

15 Q I want to focus your attention now on the
16 matters that took place after the problems of
17 PCBs came to light in the 1960's. Do you
18 knowwhat I'm --

19 A In other words, you're after certainly post
20 1960. You're up to 1968, would you say?

21 Q Yes. In the period of time where --

22 A All right. I'm with you.

23 Q Where there comes a --

24 A Enviromental concern.

25 Q Yes.

1 A Yes, all right.

2 Q Now, you were involved --

3 (End of reading)

4

5 MR. LACEY: I'm sorry, ending there --
6 skipping to Page 396, line 18.

7

8 (Reading from video deposition)

9 Q I have got a document here. It's numbered
10 508 through 511. And it's a letter that appears
11 to be dated August 6, 1970, on Monsanto Company
12 letterhead --

13 A Uh-huh.

14 Q -- and signed by you. For some reason, I
15 don't have any addressee on the letter. I don't
16 know who it was sent to.

17 (End of reading)

18

19 MR. LACEY: Go to line 4.

20

21 (Reading from video deposition)

22 Q Did you normally, when you had letters typed
23 up, show on there where who you sent it to?

24 A This one went to you right now and we are
25 talking about what we talked the other day, 1016.

1 This, I think, was left open so that
2 people's names would be stamped on because this
3 thing received wide circulation --

4 Q Uh-huh.

5 A -- ex-U.S. -- I mean ex-Monsanto.

6 Q Okay.

7 A This went as an information piece to our
8 Aroclor 1242 customers. It compares 1016 with
9 Aroclor 1242.

10 Q Now --

11 A -- which was an assignment I had.

12 Q Okay.

13 A All right. This is approximately when
14 Aroclor 1016, I think we will find, was being
15 introduced, 1970.

16 Q And you were involved in that, were you not?

17 A Yes, I was. I was the one really involved
18 in covering this with our capacitors customers.

19 Q Were you involved in trying to get them to
20 take on that product?

21 A I was -- yes. I was -- my duty was to show
22 them the difference in it and that we say that
23 there is essentially no difference; that if you
24 people are willing to accept this, it's a step in
25 the right direction to help satisfy the

1 environmentalists; if you're willing to accept
2 this, Monsanto is willing to make it and supply
3 it in replacement for 1242 if you so approve of
4 it. This is what it was.

5 I was giving them specifically -- there's a
6 specification, isn't there, a comparison of those
7 specifications?

8 Q Yes. There's attached a specification
9 for --

10 A 1016?

11 Q -- 1016 and for 124 --

12 A 1242.

13 Q -- 1242.

14 A This is exactly what this thing is, yes.

15 Q Now, I've got another -- what appears to be
16 another copy of that letter -- and I want you to
17 compare it and let me know if it is -- Document
18 15504 through 15508, that apparently indicates a
19 copy of that letter was sent to Mr. Robert E.
20 Abbe, A B B E.

21 A "Abbe" at G.E.

22 Q "Abbe"? With G.E.?

23 A All right. It says here, "You requested
24 this amount, and the" -- "the samples are being
25 sent to you."

1 And Dr. Munch had analyzed -- or had tried
2 this in our laboratory with experimental
3 capacitors and found them satisfactory.

4 Q Okay. Dr. Munch was a scientist there that
5 was --

6 A Yeah.

7 Q He was developing different dielectric
8 fluids in response in --

9 A Yes, he was. And this was one --

10 Q This was not the only dielectric fluid?

11 A Oh, no. We were trying additional things to
12 this. This is the same thing here.

13 Q Yeah. Appears to be the same letter, does
14 it not?

15 A This is exactly the same thing, yes.

16 (End of reading)

17
18 MR. LACEY: Going to line 8 on Page

19 400.

20
21 (Reading from video deposition)

22 Q Let me show you another letter, Document 512
23 through 516, dated February 18th, 1971, and
24 signed by you. Is that another one of your
25 letters involving this 1016 --

1 A Yes, it is.

2 Q -- problem?

3 A Yes, it is.

4 Now, this gives more information. Our
5 laboratory now, in '71, has completed life tests.
6 It takes time, you know. This is our additional
7 information. And, yes, this is all of this, the
8 results of life tests --

9 Q Okay.

10 A -- giving these people the benefit of what
11 we have observed.

12 Q And then I have what I believe is another
13 copy of that letter, Document 15696 through
14 15701, indicating a copy of that letter was sent
15 to General Electric at Hudson Falls, New York.

16 A That's Abbe again.

17 (End of reading)

18

19 MR. LACEY: Going to Line 8 on that
20 page.

21

22 (Reading from video deposition)

23 Q On the second page of that letter, if you
24 would turn --

25 A This one?

1 Q Yes, that letter.

2 In the fourth paragraph from the end, you
3 say, "We have an extensive research program on
4 materials for use in capacitor dielectric
5 systems." Do you see that --

6 A Where do I see that? On the second page?

7 Q Yes. Right there.

8 A Oh. "We would be most pleased to have you
9 visit" -- no.

10 Q No.

11 A Oh, all right. I'm sorry.

12 "We have an extensive research program on
13 materials for use in capacitors die" -- yes.
14 We -- at this point in time Munch had set up a
15 laboratory facility to impregnate and life test
16 experimental possible replacements for PCBs. And
17 this was one of them.

18 Q When -- now, this actually was PCB product,
19 though, wasn't it?

20 A Oh, yes. this is a PCB, and this is why it
21 didn't fly. To --

22 Q When --

23 A Go ahead.

24 Q When did Dr. Munch first develop a non-PCB
25 replacement fluid for capacitors?

1 A I don't know exactly when; but it is in this
2 time frame when we are looking for replacements,
3 whether M-16 or something else.

4 Q Did Monsanto seek to acquire patents on any
5 of the replacement fluids developed by Dr. Munch?

6 A Yes. On -- on one, yes.

7 Q And that was one that you thought had great
8 promise?

9 A I didn't.

10 Q You didn't?

11 A No.

12 Q Well, why go to the effort of seeking a
13 patent on it, then?

14 A Well, don't ask me.

15 Q Okay.

16 A I don't mean to be -- okay.

17 Q Did Dr. Munch think it had some promise?

18 A Why don't you ask him?

19 Q Okay. You don't know anything about that?

20 A Sure, I know about it.

21 Q Well, tell me what you know about it.

22 A Well, you asked for one with a patent
23 application; so, we'll talk about that one.

24 This was a hydrocarbon base. Now, early on,
25 if I can remember, yesterday we talked about

1 dielectric constant, mineral oil, 2. This is 2.
2 And we also saw PCB at 5.

3 Now, we have a hydrocarbon base that does
4 not give the capacitance for the kind of
5 capacitors that we're going to have to make,
6 which are motor-runs and ballast.

7 Now, one way of increasing capacitance is to
8 add what Munch has patented. You can read in the
9 literature. It's a diphenyl sulfone, which has a
10 high dielectric constant.

11 Now, there's two things about this. It's
12 going to cost more than PCB. It is going to be a
13 lossy-type fluid.

14 Q A what?

15 A Lossy, L O -- it's going to have dielectric
16 losses higher --

17 Q Okay.

18 A -- than one wants to deal with.

19 Now, this was submitted to the General
20 Electric Company and other people. And the
21 response was along this line -- you are aware
22 nothing is going to fly in this business unless
23 G.E. adopts it. We can assume this.

24 Their reaction to this was: "We have enough
25 trouble with lossy dielectrics that we are

1 already trying to find as replacement for PCB,
2 and we object to this for that reason." They
3 were not interested. It did not go commercial.

4 Now --

5 Q Could it have been used as an alternative
6 capacitor fluid in capacitors that were then
7 being filled with PCBs?

8 A Could it have been?

9 Q Yes.

10 A Dr. Munch, in his laboratory, made
11 capacitors that he thought were all right.

12 Q They worked?

13 A It could -- they worked, granted.

14 Q The problem was that you couldn't get G.E.
15 to buy --

16 A To use it.

17 Q -- to buy this fluid instead of PCBs?

18 A Yes. Or instead of other things, what
19 they're using now.

20 (End of reading)

21
22 MR. LACEY: Going to line 15.

23
24 (Reading from video deposition)

25 Q G.E., as I understand what you're telling

1 me, basically said, "I'd rather buy your PCBs
2 than this alternative that Dr. Munch has come up
3 with."

4 A No, I'm not saying that at all.

5 Q Okay.

6 A What I said -- and their laboratories were
7 closed doors at this point in time. They said,
8 "We all" -- "are already working with lossy
9 dielectrics as a possible replacement."

10 I know what they had in mind. They had in
11 mind phthalate ester, specifically dioctyl
12 phthalate, which they were working on. And they
13 began the life test in 1972.

14 And I guess we're in that framework of time,
15 somewhere around there.

16 Now, they had come to Monsanto and asked
17 Monsanto to supply dioctyl phthalate. Prior to
18 that and along at this point in time, Monsanto
19 had sampled G.E. with Santisizer 711. Now, to
20 make this simple, Santisizer 711 is a phthalate
21 ester just like DOP is a phthalate ester.

22 You don't want the whole explanation, is
23 that why you're smiling?

24 (End of reading)

25

MR. LACEY: Going to Page 407, line 1,
the answer continuous --

(Reading from video deposition)

A All right. Monsanto had Santisizer 711, and
and that's a phthalate ester with a -- one chain
seven carbons and another chain of 11 carbons.
Dioctyl phthalate has one chain of eight carbons
and another chain of eight carbons. Both are
phthalate esters. You can't -- they're like two
peas in a pod.

We offered Santisizer 711 to G.E., which we
made. We weren't making DOP. Later they would
ask us to do so. We didn't.

But they did not accept Monsanto's 711. The
reason: It was a tick worse on dielectric
constant, not a great thing. It cost more. And
that is important.

The other thing is they knew they could get
DOP on -- on the market, like a commodity, rock
and gravel. And this is what they were looking
for. Both products had the same limitations of
being an ester, subject to hydrolysis and
oxidation. So, why should they go with what
Monsanto offered?

1 They were looking at DOP, and this was in
2 this time frame.

3 Q You were offering them alternatives in the
4 1971 time frame?

5 To PCB, yes. And this isn't the only
6 alternative that was offered. Another
7 alternative was another hydrocarbon, which was
8 later adopted, that type thing, by Westinghouse,
9 which they had researched probably prior to this
10 time we had sampled.

11 You can say, "Well, why didn't they adopt
12 that?" Well, our -- I'm talking about isopropyl
13 biphenyl -- ours was more expensive than they
14 felt their economics -- they adopted
15 eventually -- my understanding, they now use
16 something coming from this area, a hydrocarbon,
17 quote, "isopropyl biphenyl." They call it that.
18 It's an off-stream from a petroleum hydrocarbon.

19 And the point to all of this is -- and I
20 want to make it -- the time that PCB manufacture
21 terminated was the exact time when G.E. went to
22 market with dioctyl phthalate. Monsanto always
23 said as soon as anyone -- we, anyone -- on the
24 outside has a substitute, out; because the
25 company was ordered to shut down. The only

1 reason they were making it was because of the
2 insistence and the plea of the electrical
3 industry and the EPA.

4 Q When -- when had Monsanto decided that it
5 would stop producing PCBs as soon as there was an
6 alternative?

7 A As soon as there was an alternative and G.E.
8 stopped buying PCB, that was the end of it.

9 Q Well, let me -- let me separate those two
10 apart for just a second.

11 Are you telling me that by 1970 Monsanto was
12 committed to stop selling PCBs as soon as there
13 was an alternative product for use in capacitors
14 and transformers?

15 If you know.

16 A You've asked the question. To my knowledge,
17 this is it: The very top of Monsanto -- and
18 this is in response to the YUSHO thing.

19 Q YUSHO, you're talking about the Japanese --

20 A Yes.

21 Q -- incident?

22 A When they shut down in Japan, that meant our
23 plant shuts down in Japan, too, not only the
24 Japanese.

25 Q When did that happen?

1 A It was around 1968 or somewhere in that
2 period.

3 Q So, Monsanto's PCB plant in Japan was shut
4 down in the late Sixties?

5 A Oh, yes.

6 Q Okay.

7 A I would say so.

8 Q Okay.

9 A It never really got going, because I was
10 sent over there to try to market and had no
11 success.

12 (End of reading)

13

14 MR. LACEY: And I think the answer
15 continues on line 16.

16

17 (Reading from video deposition)

18 Q Now, let's get back here. The YUSHO thing
19 is the thing of very pronounced influence on PCB.
20 I'm not saying it was fully understood. It was a
21 marked influence.

22 The directive, as I understand this -- Paul
23 Benignus speaking -- we are making something that
24 is not wanted. Simple to understand?

25 Q Yes.

16 1 A Get out.

2 Now, Monsanto proceeds to do this. It
3 wasn't difficult in the nonelectrical because
4 there were substitutes -- or substitutes could
5 easily be provided.

6 In the electrical industry -- and the reason
7 I'm telling you this -- I got a phone call from
8 G.E. "Do not let Monsanto take precipitous
9 action to shut us down as has been already done
10 in nonelectrical."

11 My response to this is: "I know what it
12 means. You don't have to tell me that it runs
13 the risk -- if you can't get PCBs for capacitors
14 and transformers, you're going to say it's going
15 to run the risk of shutting down power supplies."
16 And I believe it would have. It would have been
17 a very serious thing to do.

18 They did not have a fire resistant
19 replacement. We know this. We're talking here
20 about efforts to find replacements. None of
21 these were fire resistant. Now --

22 Q The replacements they ultimately used
23 weren't fire resistant, either, were they?

24 A That's true, too.

25 Q Okay. Go ahead.

17 1 A That's true, too.

2 Q Okay. Go ahead.

3 A Now, they pleaded, 'Don't shut down. Don't
4 shut us off.'

5 I said, quote, 'You're talking to the wrong
6 guy. You better your very top people and come in
7 to St. Louis and talk to the very top people at
8 Monsanto,' end quote.

9 This actually happened. This, they did.

10 Q Who did they talk to?

11 A They're not speaking only for themselves.
12 They're speaking for the industry. And because
13 of this -- and the government, also -- I'm saying
14 the EPA -- it's my understanding that the EPA
15 also said, quote, 'Look. If this means shut down
16 power supply in this country, you're going to
17 have to find some way to proceed without doing
18 that.'

19 Then comes this situation: Agreement by all
20 concerned to proceed on the premise that
21 capacitors and transformers are hermetically
22 sealed. And they continued to supply, pending a
23 replacement.

24 Now, Monsanto had these things. There were
25 other things. None of them flew for us. And as

1 I say, when the shutdown really came was then
2 G.E. announced and did go to market with DOP.
3 And that's the end of it and the answer to it."
4

5 MR. LACEY: Going to Page 413, Line 8.
6

7 Q (Reading) "And the very products that were
8 used in capacitors and transformers in lieu of
9 PCBs were already available in 1970, weren't
10 they?

11 A Yes, they were.

12 Q Okay.

13 A Yes, they were.

14 Q And had Monsanto stopped making PCBs in
15 1970, the transformer and capacitor people would
16 have gone to the very products they eventually
17 did go to in lieu of PCBs?

18 A This isn't exactly right. No, I don't agree
19 with that.

20 Q What would they have gone to?

21 A They -- well, all right. You're thinking
22 this through for yourself. 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 I say, when the shutdown really came was then
2 G.E. announced and did go to market with DOP.
3 And that's the end of it and the answer to it."
4

5 MR. LACEY: Going to Page 413, Line 8.
6

7 Q (Reading) "And the very products that were
8 used in capacitors and transformers in lieu of
9 PCBs were already available in 1970, weren't
10 they?

11 A Yes, they were.

12 Q Okay.

13 A Yes, they were.

14 Q And had Monsanto stopped making PCBs in
15 1970, the transformer and capacitor people would
16 have gone to the very products they eventually
17 did go to in lieu of PCBs?

18 A This isn't exactly right. No, I don't agree
19 with that.

20 Q What would they have gone to?

21 A They -- well, all right. You're thinking
22 this through for yourself. 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
2 with your thinking -- because there is a big void
3 in what you're saying because these things were
4 not tested and probed and proved out -- that it
5 would be 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
8 after DO -- G.E. did go to market with DOP and
9 Monsanto shut off, did stop producing PCBs, I can
10 assure you there were some companies flat on
11 their face because they were not able -- they no
12 longer had the PCB. They had nothing. And that
13 was a very difficult situation. We -- we were
14 called things that weren't too nice.

15 Q I see. Isn't it a fact that the decision of
16 Monsanto to keep manufacturing PCBs after it had
17 alternative products and others had alternative
18 products available, was influenced by the fact
19 that Monsanto made a lot of money selling PCBs?

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 a question about your work

1 with the American National Standards Institute
2 Committee C-107.

3 A Yes. This -- now, you're going up to 1970.
4 Well, that was published in '72 or '73. There
5 was" --

6
7 MR. LACEY: Going to Line 12.

8
9 Q You were chairman of the steering committee
10 on the --

11 A This is what I was going to say.

12 Q Okay. Tell me about that."

13
14 MR. LACEY: And then going to the
15 answer on the next page at Line 7.

16 MR. MUSSLEWHITE: Next page at Line 7.

17
18 A (Reading) "I was elected to be chairman.
19 Now, as I already told you, I was on the shelf at
20 this time.

21 Q Okay.

22 A Except I did know people. The transformer
23 makers and capacitor makers, I knew those people
24 through the years.

25 Q Were you an influential person with those

1 people?

2 A They didn't dislike me, let me say.

3 Q They knew --

4 A They knew me.

5 Q Okay. What you -- what you had to say --

6 A They knew me. And I was used to organized
7 this thing. Al Salazar at ANSI had the
8 government backing, the funds and support. But
9 he didn't know who to invite. I knew this. And
10 so, we drew up a list of people who should all be
11 invited. And this was very broad representation.

12 Q And Mr. Salazar is with National Electrical
13 Manufacturers Association, correct?

14 A But he was also secretary of -- he was also
15 with ANSI," A-n-s-i.

16 Q "Okay.

17 A On this -- in this area and in some -- in
18 some other areas.

19 Q Now, the National Electrical Manufacturers
20 Association is a trade organization of people
21 like Westinghouse, General Electric,
22 Allis-Chalmers and Maloney and others?

23 A Yes. Whereas ANSI is really -- represents
24 government, organizations, and everybody -- the
25 FDA and the Bureau of Standards and the EPA and

1 the -- everybody.

2 Q Okay.

3 A -- industry, institutional, universities,
4 and so on and so forth. Yes, this is correct.

5 Q Now, the -- this steering committee for the
6 ANSI C-107 group, you actually chaired that
7 committee, didn't you?

8 A This is what you're reading. So, yes.

9 Q I mean, is that accurate?

10 A They called me -- oh, no. I was chairman of
11 the steering committee.

12 Q Yes.

13 A Excuse me. Yes. That, yes.

14 Q And what did that involve?

15 A As I already said, as chairman of the
16 steering committee, I participated there in
17 getting this thing organized and getting it
18 together on behalf of Al Salazar, to get this
19 thing going.

20 Q Now, the actual chairman of the committee as
21 it finally wound up --

22 A Right.

23 Q -- was Mr. Papageorge, wasn't it?

24 A You're right.

25 Q So --

1 A Not me.

2 Q So, a Monsanto man chaired both the steering
3 committee --

4 A You're right.

5 Q -- and the committee?

6 A But the guy -- okay. Let's get -- let's let
7 the glory to the -- you're right.

8 Q What?

9 A You're right. But I told you that I was on
10 the shelf, and Papageorge was put in there as
11 chairman. He didn't do the active work, I assure
12 you.

13 Q Who did the active work?

14 A Well, the composition of these are given
15 in -- in those brochures there. There was a
16 separate group for capacitors. Why? Because
17 they were capacitor people and knew what they
18 could do in the capacitor area.

19 There was a separate section. They were
20 transformer people they knew. We didn't have
21 carpenters or bricklayers or so forth. We asked
22 the EPA and people like that to participate.
23 They didn't know what to do but they were invited
24 and they attended meetings, yes.

25 Q Now, you and Mr. Papageorge were on both the

1 transformer committee and the capacitor
2 committee, weren't you?

3 A Oh, as -- as ex-officio, is it, there.
4 You're right.

5 Q What does 'ex-officio' mean?

6 A I don't know; I don't know.

7 Q Did -- did you get to participate in those
8 meetings?

9 A I walked around while these guys were
10 working.

11 Q Let me show you --

12 A I went from one room to another.

13 Q Let me show you a Document 020021. And this
14 has got the actual members on those committees --

15 A That is what I was talking about.

16 Q -- doesn't it?

17 A Yeah. Yes.

18 Q Now, were there any representatives of the
19 EPA on those committees?

20 A This is what I already said. EPA was
21 invited to participate. What would the EPA do?
22 The EPA did attend the meetings. But when it
23 comes down to working out the nitty-gritty, we
24 couldn't get an EPA guy in there. We asked EPA
25 to attend all of our meetings.

1 Q Uh-huh.

2 A And if you want to get into that, we'd meet
3 in -- in Chicago with the EPA; and the next time,
4 you'd meet in Cincinnati with a different EPA
5 man. We met in Washington at Gathersberg and so
6 on. It -- we asked these people.

7 Q My point is that these committees were
8 really made up of two Monsanto people and -- with
9 the exception of one representative from the
10 Department of Army on the transformer group --
11 the transformer and capacitor manufacturers,
12 weren't they?

13 A Excuse me for laughing. And you're going to
14 say this is self-serving.

15 Q I'm just asking who -- what people were on
16 the committees.

17 A As you see it right there. You're right.

18 Q Okay.

19 A This is correct. I've tried to say how
20 come --

21 Q Well, how did it wind up like that, that --

22 A Well, I said the people on the capacitor
23 group were people knowledgeable with capacitors;
24 and the people on transformers, they were
25 knowledgeable with transformers.

1 Q I mean, I note in reviewing this document
2 that it appears that there were people from the
3 EPA and --

4 A Yes.

5 Q -- the REA and the TVA and others that were
6 on these committees, but they didn't get involved
7 in the working groups.

8 A They didn't want to work. They didn't know
9 what to do.

10 Q Okay.

11 A That's -- that's all. But they were on the
12 committee.

13 Q Okay. Now, the National Electrical
14 Manufacturing Association came out with their own
15 standards --

16 A Yes, they did.

17 Q -- for the handling of PCBs in transformers,
18 did they not?

19 A Yes, they did.

20 Q Now, did Monsanto have a role in being
21 involved in the development of the National
22 Electrical Manufacturers Association standards?

23 A From the standpoint that those NEMA
24 people -- national association of manufacturers
25 -- are the same people that I think you find

1 there on the ANSI thing, it's -- I -- it's
2 difficult for me to separate these two. I get
3 mixed up with it myself.

4 Q They are pretty closely related --

5 A Oh, absolutely.

6 Q -- the industry trade group and the ANSI?

7 A Absolutely.

8 Q Almost one in the same?

9 A Yes.

10 Q Okay. The" -- Line 22.

11 A "The one is dated '72, and I think the other
12 one is dated '73 and --

13 Q I think it's '73 and '74.

14 A Excuse me. Okay.

15 Q It appears that -- let me show you the NEMA
16 standards --

17 A Yes.

18 Q -- the National Electrical Manufacturers
19 Association. It's document 764 through 816. It
20 appears they came out in January of 1973.

21 A All right.

22 Q And then the ANSI standards, the C-107,
23 apparently came out in January of 1974.

24 A Yeah.

25 Q And that's Document 728 through 763.

1 A Uh-huh, right.

2 Q Now, those standards, both the National
3 Electrical Manufacturers Association standards
4 and the American National Standards Institute
5 standards -- and both of those were prepared by
6 these groups that basically were comprised of
7 industry people and Monsanto --

8 A Yes.

9 Q -- those standards were very similar to each
10 other, were they not?

11 A Oh, they are.

12 Q Almost identical?

13 A They are.

14 Q Yeah. Those standards are consistently
15 (sic) different than the standards that the EPA
16 came out with on behalf of the Government, are
17 they not?

18 A You're in an area now where I was out of the
19 picture.

20 Q I see.

21 A I cannot answer this. I don't know.

22 Q Well, are you aware of the fact that when
23 the government took action, its action was
24 much -- more similar to that of Japan than to
25 what these industry groups did?

1 A I didn't know that, no.

2 Q Okay. You aren't aware of the fact that the
3 government banned the manufacture of PCBs?

4 A In Japan?

5 Q No. In the United States.

6 A In the United States, banned it, yes. That
7 came a little later than '77. '79, as I
8 remember. Is that right?

9 Q It was effective 1979 --

10 A Effective --

11 Q -- but the decision was made and legislation
12 passed in 1976, wasn't it?

13 A I accept what you say."

14

15 MR. LACEY: Going to Page 425, Line 21.

16

17 Q (Reading) "What the industry recommended
18 and what the government did were very different.
19 Industry said, "Keep on using PCBs,' and the
20 government said, 'stop.' What time frame are you
21 talking about?

22 A Well, depending on what time frame you're
23 talking about.

24 Q Well, the industry was saying from 1970 on,
25 'Keep on using them; we've got to have them.'

1 A Yes, until they find a substitute.

2 Q Do these documents say anything about
3 looking for a substitute for PCBs?

4 A That wasn't the subject of these documents.
5 The subject of these documents is to try and see
6 how to prevent contamination of the environment
7 with PCBs.

8 Q I see.

9 A That is what these documents are addressed
10 to. The -- the purpose of these documents was
11 not to find a substitute. The purpose of these
12 documents is to try and specify standards as to
13 how to prevent contaminating the environment,
14 obviously, in the continuation of -- of PCBs.
15 And this is why I agree with what you've said.

16 Q In fact, wasn't it Monsanto's position that
17 it would be appropriate to continue to
18 manufacture and use PCBs in the dielectric area
19 because Monsanto was going to ensure that the
20 product didn't get out into the environment from
21 their plants and to refuse to sell PCBs to
22 anybody who let PCBs get out into the environment
23 from their plants -- if you know?

24 A I don't know, no, on that one.

25 Q I see.

1 A You ought to check with somebody else.

2 Q Well, let me show you again Document 20021
3 through 20039 and direct your attention to Page
4 20026 and '27.

5 A Okay.

6 Q That's the steering committee statement on
7 PCBs, is it not?

8 A I would assume so, yes. That's what it
9 says.

10 Q You were chairman of that steering
11 committee?

12 A Yes.

13 Q Okay. And down here in Item No. 4, it says
14 that, quote, 'Strict and effective steps have
15 been taken to avoid introduction of PCBs into the
16 environment at Monsanto' plants,' close quote --

17 A Yes.

18 Q -- "quote, and by the facilities used where
19 Askeral type transformers and capacitors are
20 made,' close quote.

21 A This is correct. This is what it says.

22 Q Okay. The position that was being taken by
23 this group was that PCBs weren't going to be an
24 environmental problem when used in the electric
25 industry because the manufacturer, Monsanto, and

1 Monsanto's customers were going to ensure that
2 they didn't get out into the environment; is that
3 correct?

4 A I did not write this. I signed --

5 Q Who wrote it?

6 A My name is on here.

7 Q It was ghost-written for you?

8 A I did not write this.

9 Q Who wrote it?

10 A I don't know, but --

11 Q Well, why is your name on it?

12 A My name was used in many ways.

13 Q Well, did you approve the documents that
14 used your name before they went out?

15 A In essence, I'd have to say yes.

16 Q Okay. So --

17 A Yes, in essence.

18 Q So, the position that the steering committee
19 was taking was that PCBs weren't going to be an
20 environmental problems in dielectric use because
21 Monsanto as the manufacturer and the people to
22 whom Monsanto sold, as the actual builders of
23 capacitors and transformers, were going to take
24 the necessary steps to keep them from getting out
25 into the environment?

1 And isn't -- isn't tht what -- isn't that,
2 in sum, exactly what you were stating?

3 A That's what it states in here, yes.

4 Q Now, do you know whether or not, in truth
5 and in fact, all of the people to whom Monsanto
6 sold PCBs actually handled them in such a way as
7 to keep them from getting into the environment?

8 A No, I do not. I do not.

9 Q Would that make any difference to you as the
10 chairman of the steering committee, signing a
11 document like that?

12 A Effort was made, as it says here, to prevent
13 spills into the environment. That was not fully
14 achieved.

15 Q Okay. And would it make any difference to
16 you, as the person signing that, that that wasn't
17 actually achieved?

18 A Yes, in full conscience, yes.

19 Q Okay.

20 Q Did Monsanto take any steps as the
21 manufacturer of PCBs to exercise whatever power
22 it had to ensure that its customers didn't allow
23 PCBs to be a problem?

24 A They did everything they could, yes.

25 Q What did they do with their customers who

1 weren't handling PCBs properly?

2 A I don't know. You would have to check with
3 the marketing -- with the person -- the business
4 director.

5 Q Well, then how can you say that they did
6 everything in their power if you don't even know
7 what they did?

8 A All right. Then I'll withdraw what I said
9 and say check into this with the top of the
10 business, which I was not.

11 Q Well, would you agree with me that Monsanto
12 should have done everything in their power to try
13 to ensure their customers didn't let PCBs get
14 into the environment?

15 A I agree with that."

16

17 THE COURT: How much more of the
18 deposition?

19 MR. LACEY: With the portion that the
20 defendant has to offer, I would say probably
21 another 45 minutes.

22 MR. MUSSLEWHITE: Your Honor, we've
23 been reading the defendants', too.

24 THE COURT: Go ahead.

25 MR. LACEY: Going to Page 441, Line 15.

1

2

Q (Reading) "Do you recall at any time when Monsanto was having trouble selling its Aroclors because the quality of its product was not as good as that of its competitors?"

3

4

5

6

A No. Who are its competitors?

7

8

Q Well, weren't there other people around the world who were making PCBs at some point in time?

9

10

A Oh, yes. No, I thought you were talking -- oh, you're -- you're into ex-U.S.

11

12

Q I'm asking whether or not you recall a period of time when Monsanto's production of PCBs was not as good a quality as that of the Japanese and the Germans, for example?

13

14

15

A No, no. Absolutely not.

16

17

Q It was always superior?

18

19

A I don't say it was superior. It was equivalent. I -- I say their quality, as far as I know, was and could have been equivalent. This comes back to setting these international standards that I worked on. That was the purpose for it, to have uniformity of quality.

20

21

22

23

Q And you don't -- you don't recall at any point in time United States plants or Monsanto in the United States being concerned that its PCBs

24

25

1 were not as good a quality --

2 A No, no. Not at all.

3 Q Okay.

4 A No.

5 Q If that happened, that would be surprising
6 to you?

7 A Oh, it would."

8

9 MR. LACEY: Going to Page 445, Line 3.

10

11 Q (Reading) "The primary source of literature
12 to people about any toxicological or
13 dermatological problems with PCBs and Askeral as
14 dielectric fluids was the literature that we've
15 already looked at, was it not?

16 A Yes.

17 Q Are you aware of any other literature
18 provided to customers about toxicology or
19 hazards, other than what we've already looked at?

20 A No.

21 Q So, as far as you know, as the person
22 designated by Monsanto to speak to advertising on
23 dielectrics, marketing on dielectrics, and
24 technical data on dielectrics, that's the sole
25 source of information supplied to customers?

1 A As far as I know, yes."

2
3 MR. LACEY: And then the witness

4 changed his answer after the deposition to
5 add, "By Monsanto. But others also supplied
6 literature."

7 Then going to Volume III, Page 6, Line

8 8.

9
10 Q (Reading) "I think at the point that we
11 stopped your deposition last time, you were
12 starting to talk about the problem of
13 contamination in dielectric fluids. And I wanted
14 to ask you some further questions about that.

15 If I understood your testimony correctly, it
16 was quite important that dielectric fluids not
17 have very much by way of contaminants in them; is
18 that correct?

19 A That's correct.

20 Q And the reason for that is that if
21 dielectric fluids have contaminants in them it
22 will have an effect on their electrical
23 properties, which is the point of making them,
24 correct?

25 A If it's outside contaminants, yeah, such as

1 moisture.

2 Q Right. Now, with regard to PCB-containing
3 dielectric fluids, of course, there was a problem
4 that existed in the 1960s with regard to the
5 quality of the PCB dielectric fluids made by
6 Monsanto; isn't that correct?

7 A I never heard of it.

8 Q I see. Let me show you a memorandum dated
9 April 26th, 1967, written by you to Mr. Vince
10 Haupt at Anniston and ask you if you recognize
11 this Document No. 9875 through 9876.

12 A Yeah, I recognize this without reading it.

13

14 MR. LACEY: Your Honor, I have a copy
15 of this document I would like to make
16 available to the jury so they can look at
17 it.

18 THE COURT: You can collect the ones
19 that the jury has already seen, if you
20 would.

21

22 (Reading from video deposition)

23 BY MR. LACEY:

24 Q Did you write it?

25 A Sure, I wrote it.

1 Q One of your concerns here was the problem of
2 being able to control the quality of the PCB
3 products that Monsanto made and in particular,
4 with regard to their ability to meet specifics;
5 isn't that correct?

6 A It says, quote, "Overseas Shipments," end
7 quote.

8 Q Uh-huh.

9 A Now, I'll answer your questions down the
10 line. But I know what this is about. I wrote
11 it. It has absolutely nothing to do with the
12 quality of the product. It has to do -- well,
13 you ask the question.

14 Q Well -- let me see if I can understand --

15 A I know what you're reading. That's a --
16 that's a humorous thing that I wrote there, and
17 I'm sure you're misled by this. I appreciate
18 this.

19 Q This was a joke?

20 A This is a joke.

21 Q I see.

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

24 Q It's just a joke?

25 A It is a joke. It has -- well, if you wish

1 to question about it, I'll answer anything you
2 want to question. It is not a -- it has nothing
3 to do with the quality of the fluid.

4 Q I see.

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

9 Q Well, let me see if I can understand the
10 background for this document.

11 A Fine.

12 Q Monsanto made PCBs in the United States,
13 correct?

14 A This is correct.

15 Q And within the United States, Monsanto
16 supplied almost all of the PCBs that were used in
17 the United States.

18 A This is correct.

19 Q Monsanto also sold part of the PCBs that it
20 made in the United States, overseas -- correct?

21 A Correct.

22 Q Within the United States, there was very
23 little competition supplied by foreign
24 manufactures for --

25 A This is correct.

1 Q -- the PCBs products, correct?

2 A Correct.

3 Q And the reason for that was that the cost of
4 transportation from a manufacturer overseas into
5 the U.S. made it very difficult for overseas
6 manufacturers to compete with Monsanto on price,
7 correct?

8 A This is correct, yes.

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

12 A This is correct.

13 Q There were other companies that made PCBs in
14 Japan and in Europe, correct?

15 A This is correct.

16 Q Within the United States, because there was
17 virtually no competition for Monsanto, as long as
18 the product met the minimum qualifications it
19 would be an acceptable product to the customer,
20 correct?

21 A It had to meet the specifications, which
22 were standardized worldwide.

23 Q Now, outside the United States, where you
24 were selling in competition with other companies
25 overseas, a customer might decide between buying

1 a Monsanto PCB product and a non-Monsanto PCB
2 product, depending upon which was the better
3 product, correct?

4 A That's not not correct. They were
5 synonymous. They were the same.

6 Q I see.

7 A You're getting into a comparison of the
8 inherent characteristics and quality of the
9 product. And that is not what this address --
10 what this is addressed to.

11 Q I see.

12 A It is -- you're correct. It does deal with
13 shipping product overseas. Now, I'd like to
14 have -- this -- as I told you, this is a -- this
15 doesn't give any of the physical constants or
16 anything else. I know what this is about. I
17 wrote it.

18 Q Well, let's see --

19 A It has to do with the package, the package
20 going overseas. This is the subject matter.

21 Q Well, you --

22 A Now --

23 Q You talk about in this memo, do you not,
24 that overseas business is hard to get because
25 other people can buy from your competitors

1 easily; is that correct?

2 A Oh, I would certainly agree with that.

3 Q And you say in particular, quote, "It's not
4 like our domestic affairs where we don't have to
5 meet competitive quality," close quote --
6 correct?

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

9 Q A joke?

10 A Now, if you want to get into the technology
11 of this, this is something quite -- if you wish
12 to discuss that, okay.

13 Q Well, this memo deals with Aroclor
14 electrical quality --

15 A Yes, it does.

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

17 A Yes, it does.

18 Q And it was talking about a problem that you
19 really had back in 1967, wasn't it?

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

22 Q You said --

23 A Let's -- let's face it. The quality of our
24 material, the intrinsic quality of our material,
25 is synonymous with the French, the -- that made

1 in Britain, in Germany, and what have you.

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

5 A Well, I told you: This is a joke.

6 Q Well, why don't you read them to me?

7 A Well, all right. Quote, "We have high
8 electrical specifications on overseas shipments
9 set" --

10 (End of reading)

11

12 THE COURT: I don't think it's
13 necessary to read this --

14 MR. MUSSLEWHITE: All right.

15 THE COURT: -- in view of the fact that
16 the jury has it and you've offered it in
17 evidence.

18 MR. LACEY: All right. Let me skip
19 over that.

20 Going to Page 13, Line 9.

21

22 (Reading from video deposition)

23 Q You say Point No. 5, were you -- you were
24 telling the truth? Those were the facts?

25 (End of reading)

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THE COURT: What page, Counsel?

MR. LACEY: Page 13, line 19.

THE COURT: Page 13?

MR. LACEY: Page 13.

THE COURT: I thought we were on 445?

MR. LACEY: We have moved to a
separate-numbered volume. They weren't
number consecutively.

THE COURT: All right. We've got
several joined together. All right.

MR. LACEY: Page 13, line 9 -- 19.

(Reading from video deposition)

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

A Absolutely?

Q Is Point No. 6 true?

A I can't speak Portuguese and Spanish. And
to converse overseas with people in a foreign
language is difficult; it's cumbersome. And
we're talking about a will-o'-the-wisp here,
an -- almost a myth. Specifically, David, we're
talking about volume resistivity and power
factor.

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

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

7 Q It does up at the top, doesn't it?

8 "Aroclor --

9 A Quote, "'Electrical Quality," end quote.

10 Q -- electrical quality.

11 A All right. Let's give it a subject. The
12 subject now is going to be the power factor or
13 dissipation factor and the volume resistivity.
14 Now, to begin with, there's no official
15 specification on the power factor because it is
16 too much a -- almost a myth, these high power
17 factors that we expect the material to have.

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

24 Now, here we're talking about shipping
25 overseas. There is -- I wish I had the

1 specification. You will find a volume
2 resistivity specification. We're talking about a
3 volume resistivity, something on the order of 10
4 to the 9th times power ohm centimeter. Now, that
5 is a tremendous amount of resistivity. Now, what
6 was happening here is that when we --

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

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

12 (End of reading)

13
14 MR. LACEY: Skip down to line 22.

15
16 (Reading from video deposition)

17 A David --

18 Q Yeah.

19 A This has to do with putting the stuff into a
20 drum of extremely highly refined quality, in
21 an -- a -- what did I use -- will-o'-the-wisp
22 thing? We can't even have a power factor
23 specification. All right.

24 We've refined this exceptionally high
25 quality, as made. The material must respond to

7
1 this when the user refines it. That's what is
2 important in his plant. Now, what I encountered
3 here, David, is that I suspected the
4 competitors -- particularly the French, and maybe
5 also the German -- that they're overseas. It's a
6 long way from here to Australia. This speaks
7 about Australia.

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

18 If we had it here and you put your finger --
19 I'm not comparing your finger to mine -- if I put
20 my finger in it, it would ruin it and it would
21 affect this reading. This is a facetious way of
22 getting attention to our plant people that I'm
23 not being as ornery as a junkyard dog, yet I do
24 understand the situation. I'm asking them, Will
25 you look into our drum for these long over --

1 this -- seas shipments?

2 I don't speak Portuguese and Spanish, as I
3 said here. It's hard for me to explain this to
4 the people. And I'm having difficulty talking
5 about it right now, David. I'd like to -- I want
6 to answer your questions. It is a facetious way
7 of approaching this subject: "Will you please
8 look into our drum package? I think our drum may
9 not be as good a drum package as the
10 competitors."

11 And as the result of it, I must have gotten
12 some feedback from a customer if -- I think it
13 mentions Australia, that the material arrived --
14 this is going back many years. I know it wasn't
15 power factor. Nobody can handle a power factor
16 specification. We didn't have any. It's so
17 touchy, so critical. But volume resistivity,
18 yes.

19 (End of reading)

20
21 MR. MUSSLEWHITE: Want me to keep
22 going?

23 MR. LACEY: Yes. This has all been
24 designated by Monsanto. They want us to
25 read it.

MR. MUSSLEWHITE: Okay.

(Reading from video deposition)

A But volume resistivity, yes. So, let's say the spec on this was -- the specification was 500 times 10 to the 9th ohm centimeter. Maybe they read something like 800 or a thousand times. When you put 10 times 10 to the 9th, you get an awful lot of zeroes out here.

All I'm telling you, is this is a facetious, humorous way, without acking like a junkyard dog or raising hell with our plant: Quote, "Will you please give some -- or at least look at our package to see if that should be looked into," end quote.

Yeah. Well, every sentence -- you can tell that that is a --

Q I'm going to --

A I'm sorry, but --

Q -- object to the responsiveness of the answer.

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

A That's a --

1 Q -- statement?

2 A -- joke, yes.

3 Q I see. When you said, "We have official
4 electrical" --

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

7 Q When you say, quote, "We have official
8 electrical test procedures but get all kinds of
9 answers on the same production batch," close
10 quote, was that true or was that a joke?

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

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

22 A This is also -- it's both ways. Let me tell
23 you this: I don't know what the sales are in
24 your skin, as different from mine, David. I
25 don't. And we're talking about infinitesimal

1 traces of contaminants. It's -- it's a
2 will-o'-the-wisp subject we're dealing with here.

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

7 A From the standpoint, if you will -- I was
8 not confident that the drum package -- not the
9 quality of the product -- the drum package --
10 that we were doing ourselves justice, from the
11 standpoint I had reason to believe that the
12 competition may have had -- I wasn't sure -- may
13 have had somewhat of a superior container to put
14 it in that would to a greater degree control,
15 handle, maintain this will-o'-the-wisp electrical
16 characteristic that we're talking about, David.
17 It had nothing to do with the intrinsic character
18 of the product. I appreciate your quandary, and
19 I didn't know it was going to be -- come out this
20 way.

21 Q Let me show you another document. It's a
22 research and development report from the Anniston
23 plant dated May 5th, 1967, by Mr. G.W. Miller,
24 Document 9839 through 9874.

25 In that document, Mr. Miller -- in the

1 summary of the document, he's just got a summary
2 of the document right there that's in two
3 paragraphs. Would you read that, please.

4 A Quote, "Bayer Cloaphen A-50 is quite
5 superior to Anniston and WGK Aroclor 1254 in
6 electrical properties. This material as received
7 exhibit a resistivity of 150,000 times 10 to the
8 9th and thermal chemical chloride stability of
9 .27 parts per million."

10 (End of reading)

11
12 THE COURT: Let me have a copy of that.

13 If you've offered it in evidence, can't
14 we --

15 MR. LACEY: I'll skip over the summary
16 piece.

17 MR. MUSSLEWHITE: Do you want me to
18 read that or not?

19 MR. LACEY: Yeah. You should have an
20 extra copy.

21 MR. MUSSLEWHITE: Do you want me to
22 finish that answer?

23 THE COURT: Go ahead and finish the
24 answer.

25 MR. POHL: They've got one for you

1 here, Judge.

2 MR. LACEY: Going to line 12.

3 MR. MUSSLEWHITE: Do you want me to
4 finish the answer or not?

5 MR. LACEY: No. You can just skip over
6 that. They have it.

7 MR. MUSSLEWHITE: It's just quoting
8 from the documents?

9 MR. LACEY: Right. Line 12.

10

11 (Reading from video deposition)

12 BY MR. LACEY:

13 Q Now --

14 A This is signed by the -- Miller.

15 Q Who is Mr. Miller?

16 A He's the chief analytical chemist.

17 Q He another joker?

18 A Is he what?

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

22 A This is not a joke. But you do understand
23 the difference between 9,600 times 10 to the
24 9th ohm centimeter resistivity versus
25 150,000 times 10 to the 9th ohm centimeter,

1 David?

2 Q My question to you is: Is it true or false
3 that the Japanese and German made PCBs with
4 better electrical properties than Monsanto?

5 (End of reading)

6

7 MR. LACEY: Going to line 11 for the
8 answer.

9

10 BY MR. MUSSLEWHITE:

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

15 Q Okay. Well, let's --

16 A But he is saying this: He is the chief
17 chemist. And he is saying that he found, no
18 doubt, by comparative analysis, that here -- it
19 was Germans -- 150,000 times 10 to the 9th ohm
20 centimeter. This is saying that the Germany
21 quality is very high. Now, I'll make a
22 comparison that is understandable. Our
23 resistivity of 9,600 times 10 to the 9th ohm
24 centimeter, David, that would have to be rated --
25 and this is sensible trying to be informative -- I

1 would have to rate that A-plus. Okay.

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

6 Q The Japanese --

7 A But he is serious here.

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

10 A The Japanese?

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

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

16 Q So --

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

20 Q Well, let's get -- let's get down to serious
21 business.

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

24 Q Let's --

25 A Yes, it is.

1 Q Let's get down to serious business. Mr.
2 Miller was serious in saying that the German PCBs
3 were superior to Monsanto's in electrical
4 properties; isn't that correct?

5 A In terms of volume resistivity, yes.

6 Q Okay.

7 A That is -- oh, excuse me.

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

14 A No, this not correct.

15 Q Not saying that.

16 A He is saying this in terms of ohm
17 centimeters, that he finds this tick superiority,
18 let's call it, in terms of ohm centimeters. Now,
19 this does not encompass the electrical quality,
20 overall electrical quality.

21 Q Well, I guess --

22 A This is merely one feature of it.

23 Q Well --

24 A He is saying that is very good quality. I
25 agree.

1 Q What he actually says is, "Bayer Chloaphen
2 A-50 is quite superior to Anniston and WKG
3 Aroclor 1254 in electrical properties." Those
4 are exact -- his exact words, aren't they?

5 A I agree to this.

6 Q It is true --

7 A He is not an expert in the electrical
8 properties of a capacitor dielectric.

9 Q I see.

10 A Mr. Miller is not.

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

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

16 Q Not just very fine. Superior to Monsanto's.

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

18 Q Okay.

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

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

23 A No, they were not.

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

25 A They were not.

1 Q Isn't it a fact that it was the difference
2 in quality that prompted the writing of your memo
3 of April 26th, 1967, that we've previously looked
4 at, Document 9865 and 9876?

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

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

20 Q That fact of the matter is --

21 A I wanted our people to see, with this as an
22 example, can they put it into a drum and ship it
23 to Australia and not lose this very high quality
24 that we made when we put it into the drum. But
25 some unknown infinitesimal ionic contaminate, no

1 doubt, caused our volume resistivity value to
2 drop -- not out of specification, because it's
3 still times 10 to the 9th ohm centimeters, which
4 is the important thing.

5 I am addressing our package. I'm using this
6 to get the attention of our people: "Look at our
7 drum, and let's see do we need to do anything to
8 improve it."

9 (End of reading)

10

11 MR. LACEY: Going to Page 28, line 16.

12

13 (Reading from video deposition)

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

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

23 Q Well, I'm trying to --

24 A -- and this is unfortunate.

25 Q I'm trying to get an insight into the fact

1 that the Japanese and the Germans were making
2 better products. And that's what these documents
3 say. And I'm having a hard time --

4 A I appreciate --

5 Q -- with --

6 A -- why you would have a hard time with this
7 thing, and --

8 Q I --

9 A Now, wait a minute. Wait a minute. Here --
10 ours is this: This is a very high -- this
11 specification is 500. We're way over it. This
12 is over it. This is way over it (indicating).
13 This is over it. These are all excellent
14 quality. Now, if we're nitpicking hairs here,
15 which is a waste of time -- but if that's what
16 we're doing -- yes, this is higher than these.
17 But you don't -- this is at 100 degrees at a -- a
18 a kilocycle. It's 10 times to the 9th power,
19 which isn't showing up here. You add these -- 10
20 to the 9th to all of these, and you have very
21 high order. These are all excellent.

22 Q Let me ask a question. You say they're all
23 excellent, correct?

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

25 Q And within the degree of excellence, the

1 German product and the Japanese product are
2 somewhat better, correct?

3 A Within that excellent, on one item, which is
4 this volume resistivity, yes.

5 (End of reading)

6
7 THE COURT: Let's don't keep going
8 over this same thing, Mr. Lacey. You've
9 offered the exhibit, and it's obvious from
10 the exhibit that that's --

11 MR. LACEY: That's fine, Your Honor.
12 Most of what I've been reading is the
13 Monsanto offering. We're reading their
14 offer for them.

15 THE COURT: Yes, but there's no need to
16 keep on arguing with him. He's obviously
17 he's not going to answer the question any
18 way except what he wants to answer it.

19 MR. LACEY: Let me to go the next
20 document.

21 MR. MUSSLEWHITE: Your Honor, do we
22 have permission to skip -- that's some of
23 their tender. Can we skip that --

24 MR. LACEY: They've gotten all theirs
25 in at this point.

1 MS. OLESEN: Actually, Your Honor, he's
2 reading Monsanto -- he's reading plaintiffs'
3 offer, not Monsanto's offer. He's been
4 reading parts of their offer with ours.

5 THE COURT: It doesn't make any
6 difference who is asking the question:
7 They've got an obstinate witness, and
8 there's no need of demonstrating it anymore
9 than you've already demonstrated it.

10 MR. LACEY: Thank you, Your Honor.

11 THE COURT: How much more of this
12 deposition do you have?

13 MR. LACEY: We've got about 60 more
14 pages, some of which is offered and some of
15 which is not.

16 Would you like for us to break here and
17 complete it in the morning?

18 THE COURT: Yes, I think maybe we'd
19 better.

20 Ladies and gentlemen of the jury, I
21 appreciate keeping you overtime. I hope it
22 hasn't been too much of an imposition. But
23 to make it up, we will -- make it up to you,
24 we will not require you to be here until
25 9:30 in the morning. So, you may be excused

1 until 9:30. Please remember the
2 instructions that the Court has given you
3 about reading anything about this case in
4 the paper or listening to it on the TV, if
5 there is anything. I presume, after being
6 here all day, you won't want to listen to it
7 or won't want to read about it either.

8 But those are the instructions. And if
9 for any reason you are affected by anything
10 that happens outside of this trial, anything
11 you might read or might hear or anyone might
12 talk to you, I will instruct you not to let
13 that happen. But if it should, then you
14 must report it to the Court and let the
15 Court know of the circumstances so that we
16 can take whatever action might be needed to
17 take.

18 All right. We'll stand recessed until
19 9:30 tomorrow morning.

20
21 (WHEREUPON AT 5:30 P.M. COURT WAS IN RECESS UNTIL
22 AUGUST 27, 1987, AT 9:30 A.M., AT WHICH TIME THE
23 FOLLOWING PROCEEDINGS WERE HAD AND DONE.)
24
25