

1 MR. LACEY: 45 minutes.

2 THE COURT: Is that both?

3 MR. LACEY: The plaintiffs' offer alone
4 is 45 minutes. I don't know the length of
5 Monsanto's offer.

6 THE COURT: Do you know, Mr. Jones?

7 MR. JONES: Yes, sir. It's at least
8 that amount of time, but like I say, Judge,
9 we can substantially shorten the deposition
10 by reading it because we all have made
11 deletions. We just can't delete the
12 portions from the video itself.

13 MR. LACEY: Their original offer, I
14 believe, was 56 minutes from the deposition.
15 I have no objection to speed this thing
16 along to showing a little bit to let the
17 jury see Dr. Munch and then read.

18 THE COURT: All right. That will be
19 fine.

20 If counsel will indicate when you think
21 you're ready to switch to the deposition.

22

23

24 (WHEREUPON THE FOLLOWING PORTIONS OF THE

25 VIDEO DEPOSITION WERE SHOWN TO THE JURY.)

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Q Will you state your full name for the record, please.

A My name is Ralph H., Ralph Howard Munch, M-u-n-c-h.

Q Tell me a little bit about your educational background following high school, if you would, please.

A Following high school?

Q Yes.

A I attended the University of North Carolina, and received a bachelor of science degree there in --

Q In what year?

A '31.

A Next year 1932, I worked on a master's degree, and was granted that degree at the end of 1932.

Q Was that North Carolina as well?

A University of North Carolina, also.

Q That and an M.S. or an M.A.?

A That was a master of science in physical chemistry.

Q Okay.

A And then I went to Northwestern University

1 and did my work for my Ph.D. in physical
2 chemistry and received that degree in 1936, I
3 believe was the date on the diploma.

4 That is the educational background.

5 Q That's fine. What permanent employment did
6 you start and when?

7 A I worked as a Rockefeller research assistant
8 at the University of Chicago for about a year.

9 Q Was this postdoctoral?

10 A Yes. That would have been postdoctoral.

11 And then I had a job with a small research
12 and development company, helping them to
13 establish a reproducible process for making
14 photocathodes for an electron telescope.

15 Following that, I went to Monsanto in
16 October of 1937, and I was with Monsanto until I
17 reached 65 in 1976 --

18 (Video Off)

19
20 MR. LACEY: If I may proceed now with
21 the written?

22 THE COURT: You may.

23 MR. LACEY: Thank you. We will begin
24 at Page 11, line 21 with Monsanto's offer.

25 THE WITNESS: Okay.

1
2 (Reading from video deposition)

3 Q Let me ask you to briefly tell me about the
4 positions that you held with Monsanto during
5 employment from 1937 through 1976.

6 (End of reading)

7
8 MR. MUSSLEWHITE: What page was that?

9 MR. LACEY: Page 11 at the bottom, line

10 21.

11 MR. MUSSLEWHITE: I'm sorry -- all
12 right.

13
14 (Reading from video deposition)

15 A I started as research chemist and as a part
16 of my indoctrination at Monsanto, I worked in the
17 analytical laboratory for a short time. And then
18 I was a part of a physical chemistry group as a
19 research chemist for several years.

20 Then I was appointed group leader of that
21 research group, and then that later split into
22 several groups and I was made a section leader.
23 And then an assistant director or research in the
24 organic chemicals division.

25 And then the management decided that they

1 wanted to have a -- some fundamental research
2 done that was not associated with the current
3 product, something that would lead to future
4 projects -- products. And so, I was made part of
5 that group.

6 And in that group, I had titles of research
7 specialist and senior research specialist; and
8 then I was made a distinguished science fellow,
9 which is the highest grade of employment that
10 Monsanto has for technical people. And I held
11 that position until I retired.

12 (End of reading)

13
14 MR. LACEY: Going to Page 16, line 15,
15 continuing with Monsanto's offer.

16
17 (Reading from video deposition)

18 Q When you were working with
19 currently-manufactured products, what products
20 did you work with, primarily?

21 A Almost everything that Monsanto made in St.
22 Louis.

23 (End of reading)

24
25 MR. LACEY: Going all the way over to

Page 34, line 9.

(Reading from video deposition)

Q Now, when you created PCBs, do you also
create --

(End of reading)

DEFENDANT ATTORNEY: Excuse me, Your
Honor, did you say Page 34?

MR. LACEY: 34.

DEFENDANT ATTORNEY: I believe you
skipped several portions there.

MR. LACEY: Did you have some offer
that I --

DEFENDANT ATTORNEY: Your Honor,
there's an offer on Page 30. I believe we
gave these to you before --

MR. LACEY: On Page 30 -- what do you
want me to read? I thought I had crossed
the offers you didn't want.

DEFENDANT ATTORNEY: Page 30, line 2
through 13.

MR. LACEY: Okay. I apologize.
Continuing then with Monsanto's offer,
beginning at line 13?

1 THE WITNESS: Line 2, he said.

2 MR. LACEY: Line 2.

3

4 (Reading from video deposition)

5 Q Now, am I correct in understanding that
6 Monsanto had a trade name for its PCB that was
7 called Aroclor?

8 A That's correct.

9 (End of reading)

10 MR. LACEY: How far does this offer go?

11 DEFENDANT ATTORNEY: Line 13.

12

13 (Reading from video deposition)

14 Q This was a patented product, was it not?

15 A I don't -- I don't think Monsanto had a
16 patent on it. I don't know that for sure, but
17 the only patent I know of was the G.E. patent for
18 its use as a dielectric.

19 Q So, you're not aware of whether or not
20 Monsanto had a patent on the actual molecule,
21 itself?

22 A No.

23 (End of reading)

24

25 MR. LACEY: Now, going to Page 34 in

1 line 9 with the plaintiffs' offer.

2
3 (Reading from video deposition)

4 Q Now, when you create PCBs, do you also
5 create impurities as well?

6 A There's -- that depends on the conditions of
7 the reaction.

8 (End of reading)

9
10 MR. LACEY: Going to Page 35, line 5
11 with Monsanto's offer.

12
13 (Reading from video deposition)

14 Q Now, if you have a reaction and you go
15 through the process of creating diphenyl and then
16 PCBs and there is oxygen present, you will also
17 create some dibenzofurans, will you not?

18 A No.

19 Q You will not?

20 A Not in any amount that we have means of
21 detecting or had means of detecting at the time I
22 was associated with this.

23 Q When were you associated with it?

24 A In the 60's and 70's.

25 Q So, your testimony is that there will be no

1 dibenzofuran contamination in PCBs that were
2 manufactured by Monsanto; is that correct?

3 A My testimony is that there is no detectable
4 amount.

5 Q Okay.

6 A In other words, we had chemical methods,
7 methods of analysis, which were sensitive to some
8 particular level. And we could say that there
9 was no dibenzofuran down to that limit of
10 detection.

11 (End of reading)

12
13 MR. LACEY: Going to Page 38, line 7
14 with the plaintiffs' offer.

15
16 (Reading from video deposition)

17 Q Do you know any or have you ever studied the
18 circumstances under which either benzene,
19 biphenyl or polychlorinated biphenyl can be
20 reacted in order to create dibenzofuran?

21 (End of reading)

22
23 MR. MUSSLEWHITE: Was that beginning
24 line 7?

25 MR. LACEY: That began on line 7. Than

1 answer is line 11.

2
3 (Reading from video deposition)

4 A The only circumstances I know of are cases
5 where the material is heated to high
6 temperatures, up in the order of 500 or 600
7 degrees centigrade, in the presence of oxygen,
8 such as in the case of a fire, or something like
9 that. Not in the kinds of conditions that would
10 exist in a chemical plant.

11 (End of reading)

12
13 MR. LACEY: Going to Page 40, line 14
14 with Monsanto's offer.

15
16 (Reading from video deposition)

17 Q Do you have an opinion on whether
18 dibenzodioxin -- and we can just call that
19 "dioxin," can't we?

20 A Yeah, surely.

21 Q Okay. Do you have an opinion on whether
22 dioxin would be created by the manufacturing
23 processes by which benzene is converted to
24 biphenyl and biphenyl is conferred to PCBs?

25 A I know of no reason to think that that would

1 take place.

2 (End of reading)

3

4 MR. LACEY: Going to Page 46, line 13.

5

6 (Reading from video deposition)

7 Q Let me show you a document 1479 through 1486
8 and direct your attention in particular to Page
9 1481 of that document, where it talks about fire
10 protection information.

11 A Let's see. Where in the page is that?

12 Q I'm sorry.

13 A Oh, up on the top, I'm sorry.

14 Q Yes. These are documents that Monsanto has
15 provided to us in connection with this lawsuit.

16 A Now, they're talking about fire conditions.

17 Q Uh-huh.

18 A Where there is plentiful air and where the
19 temperatures are up in the range that I was
20 speaking of, and these statements are based on
21 what others reported to us as analytical data
22 that they had obtained from products after
23 electrical fires.

24 Q The date you're talking about, is that
25 PCBs -- or the statements in this document are

1 that PCBs and electrical equipment have been
2 reported to produce both chlorinated dioxins and
3 furans during fire situations.

4 A Yes.

5 (End of reading)

6
7 MR. LACEY: Continuing with Monsanto's
8 offer.

9
10 (Reading from video deposition)

11 Q And is it your opinion that those statements
12 would be accurate or inaccurate?

13 A Those statements are very general
14 statements, and as far as I know -- I don't
15 actually know their accuracy. I have never run
16 any analyses, so I can't answer that, really.

17 (End of reading)

18
19 MR. LACEY: Going to Page 54, line 17.

20
21 (Reading from video deposition)

22 Q Are you aware of any circumstances where
23 your Aroclor wasn't up to quality of others
24 Aroclor?

25 A No.

1 Q Let me show you a document numbered 9839 and
2 ask if that is a copy of a memo written by Mr.
3 Miller to Mr. Kemp -- I'm not sure if it's to Mr.
4 Kemp -- it's hard to tell who it's to; but of
5 which you received a copy, dealing with the
6 problem of Monsanto's electric Aroclors not
7 meeting the foreign competition?

8 A Well, I didn't remember this report. And
9 the superiority claimed here is in a range and of
10 a type, and it's debatable whether it really was.

11 (End of reading)

12
13 MR. LACEY: Going to Page 56, line 19.

14
15 (Reading from video deposition)

16 Q When -- therefore, when there is an
17 indication that, because of the levels of
18 contamination in Monsanto's PCBs, they are not as
19 good for electrical applications as those
20 produced by the Japanese and Germans, that's a
21 matter of great concern; isn't it?

22 A Yes, except that these quantities are all
23 well below the commercial limit, and the
24 materials were all suitable for the intended use.

25 (End of reading)

MR. LACEY: Going to Page 57, line 25.

(Reading from video deposition)

Q Well, isn't it a fact that Mr. Miller says the Japanese Kanechlor is considerably better than any routine domestic production in Monsanto's operations?

A I believe that's stated there.

Q And he was a plant manager producing it?

A He was a plant man who was in charge of production.

Q And you're telling me he just didn't understand what he was talking about and it really was of no consequences; is that it?

A I am telling you that data has to be looked at with an understanding of how it was obtained.

And I spent a large part of my time trying to resolve disputes between people who were making these measurements. And it was extremely difficult to take a given sample and get the same answer in two different places.

(End of reading)

MR. LACEY: Go Page 59, line 18.

1
2 (Reading from video deposition)

3 Q Let me show you another document beginning
4 at 5978 and continuing through 6001, and ask if
5 you can identify this as a memo dated December
6 the 11th, 1968, from a Mr. C. W. Hamlet, Jr., to
7 a variety of people, including a copy that came
8 to you and your boss.

9 A Well, I evidently saw this report when it
10 was written, but I don't remember the contents of
11 it and can't say too much about it at present.

12 (End of reading)

13
14 MR. LACEY: Going to Page 60, line 13.

15
16 (Reading from video deposition)

17 Q The memo dealt with things that needed to be
18 done from a technological standpoint in order to
19 preserve and improve the quality quality of
20 Monsanto's PCB production; isn't that correct?

21 A The memo does, yes.

22 Q And the reason they needed to do that was to
23 protect Monsanto's market position; isn't that
24 correct?

25 A They did not want to have competition from

1 the foreign producers.

2 (End of reading)

3
4 MR. LACEY: Going to Page 62, line 4.

5
6 (Reading from video deposition)

7 Q This effort to improve the quality of the
8 Monsanto product and protect its market position,
9 really involved an effort to find a way to reduce
10 the level of contamination in actual production,
11 did it not?

12 A I would say so.

13 (End of reading)

14 MR. LACEY: Going to line 14.

15
16 (Reading from video deposition)

17 Q For some reason in some way these foreign
18 manufacturers had found a way to have lower
19 levels contamination in their product than
20 Monsanto had, correct?

21 A In that very low concentration range, yes.

22 Q And therefore, it was the job of Monsanto to
23 try to find a way to produce their levels of
24 contamination down to the level of the foreign
25 manufacturer?

1 A That's correct.

2 (End of reading)

3
4 MR. LACEY: Going to Page 63, line 6.

5
6 (Reading from video deposition)

7 Q Now, do you know whether or not Monsanto was
8 ever successful in reducing the levels of
9 contamination in its products down to the levels
10 achieved by Japanese and German manufacturers?

11 A No. I have no data at my disposal, and I
12 don't remember it.

13 (End of reading)

14
15 MR. LACEY: Skipping go over to Page
16 71, line 3 of Monsanto's offer.

17
18 (Reading from video deposition)

19 Q And in that regard, for example -- and let
20 me try to use an example -- we have talked about
21 the contamination problem. Between 1937 and
22 1976, were you better able to measure the level
23 of contamination in 1976 than you were in 1937?

24 A Depends on what kind of contamination you
25 are talking about. You said up to '76.

1 Q Yes. I'm just picking the two ends of your
2 career.

3 A Yeah.

4 Q You started in '37; you worked until '76?

5 A Right. Yes. There was a vast difference in
6 the ability to make measurements and do
7 analytical determinations.

8 (End of reading)

9

10 MR. LACEY: Continuing with Monsanto's
11 offer on Page 75, line 14.

12

13 (Reading from video deposition)

14 Q PCBs did not constitute the sole potential
15 dielectric fluid for transformers or the sole
16 dielectric means for transformers, did they?

17 A They didn't constitute the sole kind of
18 dielectric that could be used, but they were the
19 most practical kind to use all things considered.

20 Q Well, now, that was certain Monsanto's
21 position on it, wasn't it?

22 A Well, it wasn't just Monsanto's position.
23 It was the position of the transformer
24 manufacturers and of the regulatory agencies in
25 the whole industry.

1 (End of reading)

2
3 MR. LACEY: Continuing on Page 76, line

4 6 with Monsanto's offer.

5
6 (Reading from video deposition)

7 Q What I'm getting at, I mean, in Monsanto's
8 view if people made right decision, they would
9 select PCBs for the dielectric fluid in their
10 transformer, correct?

11 A No. Only in certain cases.

12 Q I see.

13 A Only in cases where flammability and fire
14 hazard were a prime and necessary consideration.

15 Q I see. Did Monsanto sell other transformer
16 dielectric fluids?

17 A No.

18 Q Did they specifically advise people that
19 they shouldn't use PCB in transformers except
20 where there was a concern about first hazards?

21 A The customers took that on themselves. We
22 didn't have to advise them.

23 Q Well, why is it that PCBs would only be used
24 in transformers in these special applications?

25 A Because PCBs were more expensive than

1 hydrocarbon fluids.

2 (End of reading)

3
4 MR. LACEY: Going to Page 78, line 9.

5
6 (Reading from video deposition)

7 Q I guess I'm just trying to find out and make
8 sure I understand that it's possible to have an
9 electrical transformer without having PCBs.

10 A Obviously, it's possible.

11 Q Sure.

12 A But not necessarily desirable.

13 Q Okay. Well, do you think that the United
14 States government made a mistake in banning PCBs?

15 A That is a long, long subject, and my
16 personal opinion is that they did.

17 Q Okay. And so --

18 A But that would have to be discussed in
19 detail, and I would have to show you my reasons.

20 Q Okay. Well, I just want to understand --

21 A That is a personal opinion.

22 Q I understand that. But your personal
23 opinion is that there shouldn't have been any
24 reason why Monsanto couldn't go ahead and keep on
25 manufacturing, selling PCBs right up until this

1 date; is that correct?

2 A I think it would have been a safe thing to
3 do if the material had been properly handled.

4 (End of reading)

5

6 MR. LACEY: Going to Page 85, line 13
7 of Monsanto's offer.

8

9 (Reading from video deposition)

10 Q I guess what I'm asking you is whether there
11 any aspects of your training that would be
12 relevant to evaluate the hazards of pcbs?

13 (End of reading)

14

15 MR. MUSSLEWHITE: I'm sorry. What line
16 did you start on?

17 MR. LACEY: Line 13.

18

19 (Reading from video deposition)

20 A Not really.

21 Q Okay. So, you're in the same boat as a
22 layman is with regard to that?

23 A Oh, the only difference is that I have
24 handled and been exposed to the materials for
25 40 -- pretty near 50 years, and I have never

1 observed any ill effects from my exposure to
2 them.

3 Q What conclusion are we to reach from that?

4 A I would say that they're probably pretty
5 innocuous materials in general.

6 (End of reading)

7

8 MR. LACEY: Going to Page 86, line 16,
9 continuing with Monsanto offer.

10

11 (Reading from video deposition)

12 Q What plants did you go to where PCBs were
13 manufactured?

14 A I have been in both the Anniston and the
15 Krummrich plants.

16 (End of reading)

17

18 MR. LACEY: Going to Page 89, line 9,
19 continuing with Monsanto's offer.

20

21 (Reading from video deposition)

22 Q Do you recall what protections you took
23 personally when you went to those plants where
24 PCBs were produced?

25 A I walked into them just like I would walk

1 into any place. It was not believed to be
2 necessary to put on any special clothing or any
3 special protective devices.

4 Q You didn't put any coverings over your
5 shoes?

6 A No.

7 Q You didn't wear anything over your head to
8 protect that?

9 A No.

10 Q Didn't take any precaution to wash up after
11 you left?

12 A Not unless I knew I had gotten some on my
13 hands or something like that.

14 Q How often did you get some on your hands?

15 A I've had Aroclors on my hands many, many
16 times.

17 Q More than 100 times?

18 A I can't count them up, but could easily have
19 been that many.

20 Q Would your experience in getting Aroclors on
21 you be likely to be as great as a person who was
22 working in a manufacturing operation where
23 Aroclors were used who had the same work life you
24 did?

25 A Under some circumstances, I might have

1 gotten more.

2 (End of reading)

3

4 MR. LACEY: Going to line 15 with the
5 plaintiffs' offer.

6

7 (Reading from video deposition)

8 Q Did anybody at the plants ever advise you to
9 take any precautions around PCBs?

10 A No. They knew I had a certain amount of
11 common sense and wouldn't go out and drink it or
12 something like that.

13 Q So, you didn't get any specific advice?

14 A No.

15 Q Just assumed you would know it?

16 A After all, I'm a chemist.

17 (End of reading)

18

19 MR. LACEY: Going to Page 91, line 9
20 with Monsanto's offer.

21

22 (Reading from video deposition)

23 Q Did you have any contact with the people in
24 the medical department to find out what they knew
25 about the hazards of the PCBs?

1 A I don't think so.

2 Q You just assumed if there were a problem,
3 they would let you know?

4 A I assumed that products had been
5 manufactured there for a long, long time and that
6 there had been no evidence of medical problems
7 than that. Therefore, I probably wouldn't
8 experience them either.

9 (End of reading)

10

11 MR. LACEY: Going to Page 94, line 13
12 with the plaintiffs' offer.

13

14 (Reading from video deposition)

15 Q If I had a glass that had had PCBs in it and
16 I poured that glass out, and all that would drip
17 out had dripped out --

18 (End of reading)

19

20 MR. LACEY: Excuse me. I'm sorry --
21 okay?

22

23 (Reading from video deposition)

24 A Yeah.

25 Q And if I kept washing that in water and, you

1 know, putting it under my kitchen sink like you
2 wash out a glass that's had milk in it, and you
3 keep doing that, I would or would not get the
4 PCBs out that way?

5 A It would take a terrible long time.

6 Q Four or 5 washings or lot more than that?

7 A Oh, no. It would take --, I don't know how
8 many. A hundred maybe.

9 Q A hundred washings or so?

10 A If you're talking about just water now.

11 Q Right. Talking about just water.

12 Now, if I use just any soap, will that solve
13 the problem for me and get the stuff out?

14 A Soap would be a great help.

15 Q Okay. And why is that?

16 A Because it would produce -- it would greatly
17 speed up process of emulsifying the PCB material.

18 Q If I use just an ordinary kitchen soap
19 like --

20 A Ivory soap or -- you name it.

21 Q How long would it take me to get it out if I
22 did that?

23 A Well, if I took a beaker and that had had
24 PCB in it, say 1242, Aroclor 1242, and I wanted
25 to clean it without using a solvent, I would get

1 a piece of paper towel and I would wipe out what
2 I could and then I would put in some water and
3 detergent, and I would get myself a beaker brush
4 or a scrub brush of some kind, and I would get
5 that clean, relatively clean in two or three
6 washes.

7 Q So, it would even take two or three washes
8 using soap and water?

9 A Well, it depends on how clean you have to
10 get it.

11 Q If I wanted to get it all out?

12 A You never get it all out. I mean, you're
13 one of these people that wants to talk about
14 zero, and there ain't no such thing.

15 Q You mean once I put PCBs in a beaker, I will
16 never get that beaker clean again?

17 A You will never get every last atom of it
18 out.

19 (End of reading)

20
21 MR. LACEY: Going to Page 101, line 18,
22 continuing with the plaintiffs' offer.

23
24 (Reading from video deposition)

25 Q Would you agree with me, just like technical

1 literature that we talked about earlier, it would
2 be important that warning labels be accurate,
3 based on the information available at the time?

4 A Sure.

5 (End of reading)

6
7 MR. LACEY: Continuing on Page 102,
8 line 5.

9
10 (Reading from video deposition)

11 Q And also, just like technical literature, if
12 you don't know, it would be better not to say
13 anything than to say something that's wrong,
14 wouldn't it?

15 A If you say something that's wrong in a way
16 that might harm the public, yes. If you say
17 something that induces them to take a little bit
18 greater precautions than it would be necessary,
19 no.

20 Q Okay. It would be better to give
21 information that would cause greater precautions
22 than necessary than to give information that
23 would lead someone to take less precautions than
24 necessary?

25 A Yes.

1 Q Okay. Again, that is just what you, as a
2 Ph.D. chemist would want in warning labels for
3 information on materials supplied to you,
4 correct?

5 A Yes.

6 Q Even you as a Ph.D. chemist appreciates
7 having warning labels on material that you're
8 going to use, don't you?

9 A No. I think they go too far nowadays.

10 Q Oh, I see. So, you would prefer there be no
11 warning labels on materials that come to you?

12 A I don't feel they are that necessary.

13 Q Is part of that because you are a Ph.D.
14 chemist?

15 A Part of that is because I've had experience
16 with most of these things and have a fair idea of
17 which ones are toxic and which ones are not.

18 Q Well, the rest of us, the laypeople out
19 there who haven't had the benefit of a bachelor's
20 degree and a master's degree and a Ph.D. in
21 chemistry, there's a little bit more need for
22 those warnings labels, isn't there?

23 A Obviously, there is more need for them.

24 (End of reading)

25

1 MR. LACEY: Going to Page 104, line 11
2 with Monsanto's offer.
3

4 (Reading from video deposition)

5 Q In terms of knowing about PCBs and their
6 properties and those sorts of things, the people
7 who generally knew the most were the various
8 manufacturers around the world, were they not?

9 A You mean manufacturers who used them in
10 making capacitors or transformers and that kind
11 of thing?

12 Q No. I'm talking about the people who
13 actually manufactured the chemicals, themselves.

14 A The chemical itself.

15 They were the source of all of the
16 information that other people had, and I think
17 they communicated quite thoroughly to users the
18 information that was available at the time.

19 Q Have you done any investigation of that
20 communication to form a basis for your opinion
21 that it was thoroughly communicated?

22 A I didn't go out and make project of this,
23 but I have seen the information that our
24 salespeople took to various customers and have
25 been present when they described some of the

1 information that we had on the products.

2 Q And to the extent that you heard it and saw
3 it and knew about the substance, you thought it
4 was correct?

5 A Yes.

6 (End of reading)

7

8 MR. LACEY: Going to Page 112, line 9.

9

10 (Reading from video deposition)

11 Q Would you characterize the actions of the
12 government, the EPA, the OSHA and other as a
13 witch hunt?

14 A I would say they are vastly overreacting to
15 a situation.

16 Q I see. FDA, I guess, would be on that witch
17 hunt, too?

18 A I don't know so much about the FDA. I'm
19 talking about people like the EPA.

20 Q I see. And you think we would all be better
21 off if they close their doors and went out of
22 business and left us alone to let industry take
23 care of all?

24 A I didn't quit say that.

25 Q Well, is that your opinion?

1 A I said that they are going the too far.

2 Q I see. Is "too far" a definition of what
3 they are doing, that you wouldn't personally do
4 yourself?

5 A I suppose it gets to be somewhat personal.

6 (End of reading)

7

8 MR. LACEY: Your Honor, we come to a
9 portion of Monsanto's offer that's covered
10 in the Court's Motion in Limine where the
11 bench needs to be approached.

12 THE COURT: Where does it start?

13 MR. LACEY: Page 113, line 7. The
14 answer that starts with line 7 and
15 continuous down through line 21.

16 THE COURT: The objection will be
17 sustained.

18 MR. LACEY: Thank you, Your Honor --

19 Going to Page 118, line 9, the
20 plaintiffs' offer.

21

22 (Reading from video deposition)

23 Q Did the work confirm that Monsanto customers
24 were putting PCBs into the environment?

25 A Yes.

1 Q What, then?

2 A Well, some of them made efforts to minimize
3 that, and some didn't take our warning as
4 thoroughly as they should have.

5 Q Who did take your warning to heart?

6 A I can't remember the whole list.

7 Q Do you remember any of them?

8 A I had better not make a statement on that.

9 Q Who didn't take your warning to heart?

10 A I would rather not answer that.

11 Q Do you know the answer?

12 A I know of one company.

13 Q This is an important case. I need to know
14 the answer.

15 A General Electric was the company I had in
16 mind.

17 Q Did Monsanto take any effort to re-inforce
18 with General Electric its warnings?

19 A We certainly did.

20 Q Was that effective?

21 A No.

22 Q Did Monsanto continue to sell PCBs to them
23 anyway?

24 A Yes. We had to.

25 Q You were forced to?

1 A Monsanto was the sole supplier, and it would
2 have put G.E. out of the capacitor and
3 transformer business.

4 Q Well, wait. Weren't there --

5 A We would have had a suit on our hands. In
6 fact, we were threatened with that.

7 Q Weren't the Japanese still making PCBs, or
8 did they decide to stop doing that?

9 A I don't remember. But they had a furor, and
10 I think they had gone to other materials earlier.

11 Q What about the Germans? Weren't they still
12 making PCBs?

13 A They probably were. I don't remember I
14 don't know that for a fact.

15 Q I mean, certainly General Electric could
16 have gotten PCBs from some other source, couldn't
17 they?

18 A In theory but not in practice.

19 Q Not in practice?

20 A It would have been extremely difficult.

21 (End of reading)

22

23 MR. LACEY: Going to line 20.

24

25 (Reading from video deposition)

1 Q Apparently you think other countries worked
2 on that more quickly than the United States
3 though?

4 A Worked on what?

5 Q Alternate materials.

6 A The Japanese did. I don't know about
7 others.

8 (End of reading)

9

10 MR. LACEY: Going to Page 121, line 13,
11 with Monsanto's offer.

12

13 (Reading from video deposition)

14 Q Go ahead with your explanation of what
15 Monsanto did in response to this problem of PCBs
16 in the environment.

17 A Well, Monsanto did several things, one of
18 which was to assign me the job of attempting to
19 develop a satisfactory capacitor impregnant which
20 contained no chlorine.

21 Q Okay.

22 A And I did that. Before we did that, we
23 determined from the analytical data from outside
24 laboratories that the materials which were being
25 found in environment were the more highly

1 chlorinated homologues of the Aroclor series. In
2 view of the fact that we could calculate from our
3 knowledge of how much material had been made and
4 that what was found in environment was not like
5 what would have been the result of escape of what
6 we made, we knew that the higher homologues were
7 indeed more persistent in the environment.

8 So, we decided that the best approach to
9 this was to produce a material which we called
10 Aroclor 1016, which was similar to Aroclor 1242,
11 but which was a distilled product in which the
12 chlorination was carried out in such a way as to
13 minimize the tetra, penta, and so on -- higher
14 homologues in the series.

15 (End of reading)

16
17 MR. LACEY: Going to line 22 and
18 continuing with Monsanto's offer.

19
20 (Reading from video deposition)

21 Q Let me ask this: It has been my
22 understanding from Dr. Richard that Monsanto in
23 early 1970's stopped selling PCBs for certain
24 uses. Are you --

25 A That was another one of the steps that was

1 taken, the idea being that the material certainly
2 can't do any harm as long as they are in a sealed
3 capacitor case or a transformer case. It's only
4 when they get into the environment that they have
5 been claimed to have any harmful effects. And
6 so, our hope was that if we sold them only for
7 use in sealed electrical equipment, this would
8 alleviate the situation.

9 Q And so that they could continue to be
10 manufactured and sold for use in sealed
11 electrical equipment without any further problems
12 forever, correct?

13 A Well, we didn't know that. We knew that the
14 capacitor industry would have had to have a lead
15 time of several years to take any other product
16 and convert it. So, we couldn't just go out of
17 business and say, quote, "Here. You guys have
18 got to use something else tomorrow," end quote.

19 Q Well, my question is slightly different.
20 And let me make it clear: What Monsanto was
21 hoping was that by ceasing to sell it for certain
22 uses, they could keep from having situation
23 develop where they wouldn't be able to sell it
24 for electrical uses; isn't that correct?

25 A No, not quite. We were hoping that this --

1 that this approach to the problem would give the
2 customers enough lead time that they could come
3 up with suitable substitutes.

4 (End of reading)

5
6 MR. LACEY: Going to Page 128, line 3,
7 and continuing with Monsanto's offer.

8
9 (Reading from video deposition)

10 Q And then in addition to doing that, Monsanto
11 developed or tried to develop products containing
12 PCBs that had a lower level chlorination
13 generally than the PCBs it had produced for the
14 same uses prior to -- previous to 1970; isn't
15 that correct?

16 A Yes. Or the particular emphasis was to
17 reduce the amount of the very highly chlorinated
18 materials which were very -- which were the more
19 persistant materials in the environment.

20 Q So, for example, you would try to have a
21 material that had very little PCBs that had six
22 chlorine atoms on it.

23 A Yeah, yeah.

24 Q And that was done with regard to PCBs that
25 were going to continue to be sold for electrical

1 uses, correct?

2 A Yeah, uh-huh. Now, that was a lot more
3 complicated than it sounds like because it took
4 an awful lot of testing on our part to prove that
5 these materials were equivalent, insofar as the
6 capacitor manufacturers were concerned, to the
7 Aroclor 1242. After we had done that, they had
8 to go ahead and do it on their on. And these
9 tests are tests that you require six months to a
10 year or more to make.

11 Q So, there was a period of time of a year or
12 more after Monsanto set out to do that before it
13 could actually be accomplished.

14 A That would -- before the capacitor
15 manufacturers would accept this material and put
16 it into commercial use.

17 (End of reading)

18

19 MR. LACEY: Going to Page 131, line 2,
20 and continuing with Monsanto's offer.

21

22 (Reading from video deposition)

23 Q Do you know whether Monsanto made any sort
24 of presentation to any government groups about
25 bills to regulate toxic substances?

1 A Not in general. It's quite possible that
2 they did, but I had no direct involvement with or
3 direct knowledge of whether or not that was done
4 or how it was done or who did it if it was done.
5 The only thing I do know about was in a meeting
6 in Washington where a group of us went and
7 outlined what we knew about the PCB situation to
8 the -- well, members of the several branches of
9 the government that were concerned about this.
10 And out of that meeting somehow or another came
11 an agreement by the government that we should go
12 ahead and manufacture these materials.

13 Q You actually participated in some of those
14 meetings to talk to government about presenting
15 Monsanto --

16 A The one particular one that I'm talking
17 about.

18 Q Uh-huh.

19 A And that was not to a committee of Congress
20 or anything like that. It was a group of
21 personnel from various departments of the
22 government.

23 Q Was that a technical presentation, designed
24 to justify the continued production of PCBs?

25 A It was a technical presentation just

1 designed to show the government people that were
2 interested in this problem what the particular
3 situation was at that time -- in other words,
4 what we were doing to try to improve the
5 situation, what difficulties our customers would
6 have, and -- if we stopped, and things like that
7 -- what the consequences to the general public
8 would be if we stopped, and all that sort of
9 thing.

10 Q Was the Monsanto presentation designed to
11 suggest that there was no need to stop the
12 production of PCBs?

13 A No. I think it was meant to show that it
14 would be very harmful if it was done suddenly.

15 Q And was it designed to convince the
16 government that it was necessary, from a matter
17 of public interest, to continue with the
18 manufacture of PCBs?

19 A On a temporary basis, but not permanently.

20 (End of reading)

21
22 MR. LACEY: Skipping all the way over
23 to Page 146, and continuing with Monsanto's
24 offer.
25

1 (Reading from video deposition)

2 Q And you're certainly not suggesting that we
3 have got to wait until a lot of humans have
4 cancer before we take any protective measures,
5 are you?

6 A No, not quite that. But I am suggesting
7 that we cause a --

8 (Reading interrupted)

9

10 DEFENSE COUNSEL: Objection, Your
11 Honor. We did not not designate that. In
12 fact, we deleted any portion of that.

13 MR. LACEY: Okay. I apologize. It's
14 what's marked in mine as your designation.

15 Skipping then to Page 150, line 23.

16 This is the plaintiffs' offer.

17

18 (Reading from video deposition)

19 Q Can you think of any particular studies that
20 you consider pseudoscientific?

21 A Well, no, I haven't got a specific example
22 now. It has been quite a while.

23 Q Can you give me --

24 A It has been quite a while since I have read
25 any of those.

1 (End of reading)

2
3 MR. LACEY: Going to Page 151, line 21.
4

5 (Reading from video deposition)

6 Q One mentioned that Monsanto used Industrial
7 Biotest for many of its studies of PCBs; is that
8 correct?

9 A Yes, that's correct.

10 Q Did you ever keep up with the problems that
11 Industrial Biotest wound up having regarding its
12 work?

13 A I have heard about them, but I had nothing
14 to do with this in detail. I know that their
15 work was discredited, that much of it had to be
16 duplicated and that sort of thing. But I had
17 nothing to do with this.

18 Q What do you know about their work being
19 discredited?

20 A I only know what I heard.

21 Q What was that? As a scientist, what went
22 around in the scientific community about
23 Industrial Biotest?

24 A Well, that some of their people had not fed
25 the right amount of some material and had been

1 careless about how they kept records and things
2 of that kind, which invalidated the results that
3 results that they came out with.

4 Q Did you ever hear anything about any
5 problems they had with any regulatory agencies or
6 governmental groups because of that?

7 A I know that some of their results were
8 thrown out by the EPA and had to be -- tests had
9 to be duplicated by other organizations.

10 (End of reading)

11
12 MR. LACEY: Going to line 25.

13
14 (Reading from video deposition)

15 Q The fact that it turns out that researchers
16 didn't use the right methodology, didn't feed the
17 right amounts, et cetera, would that be what you
18 would call pseudoscientific work?

19 A Well, that's a little bit lower, still, on
20 the scale. That's deliberate fraud.

21 Q That's even worse than pseudoscientific
22 work?

23 A Yes.

24 Q Pseudoscientific, I guess, is someone who is
25 trying hard but didn't do it very well?

1 A Yeah.

2 Q And this stuff that you heard about
3 Industrial Biotest, that's outright fraud?

4 A That's a reasonable statement.

5 Q Okay. I mean, that is your statement, isn't
6 it, your word?

7 A Yeah, yeah.

8 Q And I guess you, as a scientist, wouldn't
9 want to place much stock in pseudoscientific
10 work?

11 A No.

12 Q You wouldn't want to place any stock at all
13 in work that was fraudulent, would you?

14 A Obviously not.

15 (End of reading)

16

17 MR. LACEY: Going to Page 159, line 17,
18 continuing now with Monsanto's offer.

19

20 (Reading from video deposition)

21 Q To the extent that you know, what was the
22 approach that Monsanto had with regard to --
23 after it stopped selling for applications other
24 than dielectric fluid and developed Aroclor 1016,
25 what else did Monsanto's business people carry

1 out through people like you? What planpaln did
2 they have?

3 A Well, I told you that we developed a fluid
4 which we called MCS 1238. This was a material
5 which contained no chlorine in its composition.

6 We not only developed that fluid, but
7 we ran extensive long-term tests. And by this, I
8 mean months of tests on capacitors that we
9 manufactured using that fluid.

10 After we had obtained favorable
11 results, ourselves, we took samples of that
12 materials to all the capacitor manufacturers.
13 We said "Here is a fluid which we have tried. We
14 believe that it duplicates the performance of the
15 Aroclor type fluid with the exception that it is
16 not fire resistant."

17 We urged them to run their own tests
18 and a number of them did. Not everybody but
19 General Electric and Westinghouse and quite a
20 number of the other smaller and intermediate size
21 capacitor manufacturers did this. They took the
22 material that we gave them. They made
23 capacitors. They put them on what are called
24 life tests, where the capacitors are exposed to
25 higher than actual use voltages and higher than

1 actual use temperatures in the hope of making
2 failure more rapid so that you can compress the
3 time scale of the test.

4 They did this, and they found that they
5 agreed with what we had said about the material.
6 It was suitable material.

7 And then after this, there was a
8 discussion about actual commercial use of the
9 material.

10 (End of reading)

11
12 MR. LACEY: Going Page 161, line 5 with
13 the plaintiffs' offer.

14
15 (Reading from video deposition)

16 Q You developed a dielectric fluid strategy,
17 did you not?

18 A I think I did. I don't remember the exact
19 form or pr exactly what I said anymore, but --

20 Q Okay. Let me see if I can help you with
21 that.

22 A Okay.

23 Q I'm going to show you a document. It's a
24 rather thick document that was present to us by
25 Monsanto, but I want you to direct your attention

1 to Pages 8935, 36, 37, these three pages. Let me
2 ask you to look that over and tell me if that is
3 the dielectric fluid strategy that you developed?

4 A This was my suggestion and, of course, it
5 was a suggestion and something that I couldn't
6 put into -- I couldn't put into practice unless
7 people like Mr. Gossage had approved it.

8 (End of reading)

9
10 MR. LACEY: Going to Page 163, line 1.

11
12 (Reading from video deposition)

13 Q What is TXSMIB?

14 A TXS is tolylxylosulfone. MIPB is
15 monoisopropylbiphenyl.

16 (End of reading)

17
18 MR. LACEY: Going to line 18?

19
20 (Reading from video deposition)

21 Q Well, that material, had you already that
22 material at the time that you wrote that memo?

23 A Yes. A patent application has been filed.

24 Q What was the a material for?

25 A For impregnation of capacitors to replace

1 the PCB type materials.

2 Q So, you already had a material far enough
3 along that you could have filed a patent
4 application for it by the time of that memo; is
5 that correct?

6 A Yes.

7 Q What is date of that memo?

8 A And we had taken that out and had our
9 customers test it and were trying to sell it to
10 them, but our customers weren't about to use it
11 as long as they could have the Aroclor 1016.

12 The date is --

13 Q What is the date of the memo?

14 A March 22nd, '72.

15 (End of reading)

16

17 MR. LACEY: Skipping over to Page-165,
18 line 13 of Monsanto's offer.

19

20 (Reading from video deposition)

21 Q By March 22nd, 1987, you had already
22 developed -- and this was you and your group
23 hadthat developed it?

24 A Yes.

25 Q You, in your group at Monsanto had already

1 developed a dielectric fluid that, in your
2 opinion, be a suitable replacement for PCB
3 containing fluids; is that correct?

4 A That's correct except for fire resistance.

5 Q Okay. It was a fluid that was sufficient
6 acceptable that at least one capacitor
7 manufacturer would buy it and use it commercially
8 for that purpose?

9 A Yes, on a small scale.

10 Q And reason that other people wouldn't buy it
11 from you and start using it in 1972 is because
12 you would continue to sell them PCB fluids; isn't
13 that correct?

14 A No. It was because General Electric would
15 not accept this fluid and insisted on going along
16 with the fluid that they made for themselves.

17 (End of reading)

18
19 MR. LACEY: Skipping down to line 14,
20 continuing with Monsanto's offer.

21
22 (Reading from video deposition)

23 Q And they could have, then, bought this
24 product from Monsanto and used it in their
25 capacitors, could they not?

1 A But they would not do that because the
2 capacitor business is built on the philosophy
3 that a capacitor has to last 20 or 30 years in
4 service. And before they were put a new product
5 on the market, they have to go through tests that
6 are so longwinded and time consuming and
7 expensive that you wouldn't believe it. They
8 take years, some of them.

9 And we pushed and shoved and tried to
10 get the industry to use these products, but we,
11 as suppliers, couldn't force them to.

12 (End of reading)

13
14 MR. LACEY: Going down to line 9,
15 continuing with Monsanto's offer.

16
17 (Reading from video deposition)

18 Q Do you know whether or not you did have the
19 right to stop selling PCBs?

20 A Oh, no, we didn't have.

21 Q How do you know that?

22 A Because General Electric is a large company.
23 It's bigger than Monsanto. And the capacitor
24 transformer business -- what I was talking about,
25 the capacitor business alone now, was a large and

1 very important business to them.

2 They would not risk their repetition by
3 putting on the market a product which they had
4 not tested to the extent that they felt that they
5 were not sure that the capacitor that they made
6 with it would have long-term life, as I said, in
7 a 20 to 30-year range. And Monsanto had been a
8 long-time supplier of General Electric and could
9 not just simply say overnight unilaterally,
10 "Tomorrow we are going to quit making this
11 stuff."

12 (End of reading)

13
14 MR. LACEY: Going to Page 169, line 18
15 of the plaintiffs' offer.
16

17 (Reading from video deposition)

18 Q Mr. Papageorge certainly knew about this
19 replacement fluid that you were seeking a patent
20 on, didn't he?

21 A Yes, he certainly did.

22 Q Mr. Benignus certainly knew about this
23 replacement dielectric --

24 A Yes.

25 Q -- fluid that you were seeking a patent on,

1 didn't he?

2 A Yes.

3 Q Mr. Throdahl knew about the replacement
4 fluid that you seeking a patent on, didn't he?

5 A Somewhat later.

6 Q Well, who knew about it as of date of that
7 memo?

8 A Well, that's hard for me to answer. I
9 don't --

10 Q Mr. Gossage knew about it?

11 A Mr. Gossage knew about it, and all his
12 subordinates.

13 Q Where was Mr. Gossage in the chain of
14 command? He was pretty well up the line, wasn't
15 he?

16 A He was manager of what they called the
17 fluids division.

18 Q He was manager of the whole division in
19 which PCBs were made, wasn't he?

20 A Yes.

21 (End of reading)

22

23 MR. LACEY: Going to Page 171, line 13.

24

25 (Reading from video deposition)

1 Q You had already tested it, hadn't you?

2 A Yes.

3 Q You don't seek patents on things that don't
4 work, do you?

5 A No.

6 Q You seek patents on things that you think
7 are not only going to work, but are going to work
8 so well that you wasn't to make sure nobody else
9 can manufacture them without getting a license
10 from you; isn't that correct?

11 A Obviously.

12 Q The point of a patent is to protect the
13 monopoly in it, isn't it?

14 A To protect the research efforts that you put
15 into developing a material.

16 Q Just like Monsanto had a monopoly on the
17 sale of PCBs in the United States, they wanted to
18 have a monopoly on the sale of the replacement,
19 didn't they?

20 A That's like any company that seeks a patent
21 or a new drug or a new mechanism for a car or a
22 different kind of a transistor, whatever. It's
23 no different.

24 Q And that protects the profit or the money
25 they can make off of that, doesn't it?

1 A They enables the company to recover the
2 money that it has spent in making the recovery
3 and hopefully, in making the invention and
4 hopefully to make a little profit on it.

5 (End of reading)

6
7 MR. LACEY: Going to Page 181, line 6,
8 continuing with the plaintiffs' offer.

9
10 (Reading from video deposition)

11 Q The last point is "If the patient is not
12 granted, depends on your skill and in
13 manufacturing and purifying the fluid."

14 What do you mean by that?

15 A That probably, I meant that this fluid is
16 not -- I can tell you that that fluid contains in
17 such and such percentages of tolylsylosulfone and
18 monoisopropylbiphenyl.

19 You can go into a laboratory and get bottles
20 of these and mix them up and you would come up
21 with a product that would be totally
22 unacceptable.

23 To make the product acceptable, one has
24 to go through some rather rigorous purification
25 procedures.

1 Q What you're saying here, isn't it, is if you
2 don't get the patent on this product, that you
3 would then hope that you could nevertheless
4 maintain a monopoly on its manufacture because
5 you would be better able to manufacture it and
6 purify it than any other competitor. Isn't that
7 point?

8 A I guess that's a reasonable way to put it.

9 Q And again Monsanto's dielectric fluid
10 strategy was to develop an alternative capacitor
11 fluid that you would be able to monopolize, just
12 like you did PCB fluid; isn't that correct?

13 A Obviously. We didn't want to develop
14 something that everybody else would start to
15 manufacture after we had gone to the expense and
16 trouble of developing it.

17 Q And since you weren't sure in March of 1972
18 if it would get patented or not, you didn't want
19 to put it on the market in competition with your
20 PCB fluid that you did have a monopoly on,
21 because if you were wrong and somebody else could
22 manufacture it since you didn't have a patent,
23 then, you would lose sales to competition,
24 wouldn't you?

25 A It wouldn't have been very likely.

19
1 Q But you might have, might you?

2 A In theory.

3 (End of reading)

4

5 MR. LACEY: Monsanto's offer.

6

7 (Reading from video deposition)

8 Q And one of the reasons you didn't want to
9 stop making PCBs in 1972 and go to new product is
10 because you weren't guaranteed monopoly on it at
11 that time; isn't that true?

12 A I don't think so.

13 (End of reading)

14

15 MR. LACEY: Plaintiffs' offer.

16

17 (Reading from video deposition)

18 Q By the way, this dielectric fluid strategy
19 had already been approved by people above you
20 when you wrote that memo, hadn't you? What
21 I'm --

22 A Before the date here?

23 Q Yes. Because it says "The attached
24 dielectric fluid strategy has been revised to
25 take into account your comments on the one sent

1 out with my memo of March 17th." Isn't that
2 correct.

3 A Yes. It must have been a prior version of
4 this which differed from this. I don't know how,
5 probably only in small details.

6 Q But that means that Mr. Gossage had already
7 had a chance to review this document and make his
8 suggested changes, doesn't it?

9 A Yes.

10 Q And this document incorporated the changes
11 suggested by Mr. Gossage, didn't it?

12 A That is what it says.

13 (End of reading)

14
15 MR. LACEY: Going to Page 184, line 9,
16 with Monsanto's offer.

17
18 (Reading from video deposition)

19 Q By the way, Dr. Munch, while your lawyer is
20 reviewing that document, this alternative
21 dielectric fluid could have also been used in
22 transformers, could it not?

23 A No. It would not have been suitable to
24 that.

25 Q Why is that?

1 A Well, maybe I should rephrase what I said.
2 You could have made a transformer with that fluid
3 in it but it would not have made good sense to do
4 so.

5 Q And why is that?

6 A The product had no advantages over ordinary
7 mineral oil and would have been considerably more
8 expensive.

9 Q Okay. Were you also working on substitute
10 fluids for the PCB uses of transformers?

11 A No. We had decided that there were no chemical
12 alternatives that we had available to us that
13 would result in an acceptable product.

14 (End of reading)

15
16 MR. LACEY: Going to Page 187, line 19,
17 with the plaintiffs's offer.

18
19 (Reading from video deposition)

20 Q Were you ever advised by Mr. Gossage, Mr.
21 Bergen or anybody else at Monsanto that they
22 rejected the policy that you proposed?

23 A No.

24 Q As far as you can tell from observing the
25 conduct of Monsanto for the next four years, they

1 implemented that policy, didn't they?

2 A In general.

3 (End of reading)

4

5 MR. LACEY: Going to Page 189, line 9.

6

7 (Reading from video deposition)

8 Q Would you consider that an appropriate
9 action if Monsanto had urged others to join with
10 it in attacking any governmental action to ban
11 PCBs?

12 A I'm of the opinion -- this is a personal
13 opinion -- that it was a wise move to try to
14 prevent a sudden changeover because that would
15 have resulted in a lot of disaster in the
16 electrical energy business. Been a lot of false
17 moves and a lot of bad capacitors and possible
18 injuries to personnel and all sorts of things if
19 that had been attempted on an overnight, quick
20 basis.

21 Q Well, certainly you had a substitute product
22 available by 1972, correct?

23 A We had one that we believed was, but one
24 which the capacitor industry had not yet
25 accepted.

1 Q I understand. Certainly there would have
2 been every availability of getting that product
3 tested by people like General Electric within the
4 next couple of years, wouldn't it?

5 A It would have taken something like a couple
6 of years, yeah. In theory, that it could have
7 been done.

8 But now, you should realize that
9 General Electric is a large and proud and
10 powerful organization and that nobody like
11 Monsanto can push them around. The government
12 might be able to, but Monsanto certainly
13 couldn't.

14 (End of reading)

15
16 MR. LACEY: Going to Page 206, with the
17 plaintiffs' offer.

18
19 (Reading from video deposition)

20 Q My point or my question to you is: You have
21 already told me that in truth and in fact,
22 Monsanto knew that General Electric did not
23 properly control the Aroclors that Monsanto sold
24 to it, to prevent their entry into the
25 environment; isn't that correct?

1 A That was correct up to the time I left
2 Monsanto.

3 Q Up to 1976.

4 A Yes.

5 (End of reading)

6

7 MR. LACEY: Monsanto's offer.

8

9 (Reading from video deposition)

10 Q So, from the time --

11 A They probably changed between that time and
12 the date of this report.

13 (End of reading)

14

15 MR. LACEY: Page 208, continuing with
16 the plaintiffs' offer, line 4.

17

18 (Reading from video deposition)

19 Q Monsanto continued to sell PCBs to General
20 Electric after 1971 even though they knew that
21 General Electric was not handling them properly;
22 isn't that's correct?

23 A We continued to sell them. I'm not sure how
24 much of that time we knew that General Electric
25 was not handling them properly.

1 The thing that happened was that in
2 order the help the customers handle them
3 properly, Monsanto analyzed for them samples of
4 their plant waste streams. And I don't know when
5 that was done. And I don't know exactly when --
6 how it relates to this. But we did tell them the
7 results of that analytical work and we did exert
8 the pressure that we had, that we capable of
9 exerting to get them to change their process.

10 Q You didn't stop selling to them, though?

11 A No. I don't think we could have got away
12 with it.

13 Q Well, that would have been the maximum
14 amount of pressure, wouldn't it?

15 A Yes, but I am not sure we were in a position
16 to exert it.

17 (End of reading)

18 MR. LACEY: And continuing with
19 Monsanto's offer on Page 209.

20
21 (Reading from video deposition)

22 Q Did Monsanto also have people who went and
23 visited General Electric's facilities to see how
24 they were handling PCBs?

25 A No. They let us in the front door and let

1 us talk to their research people and things like
2 to that. We didn't have a chance to go through
3 their plants, except once in a while on a very
4 rare occasion.

5 Monsanto -- G.E. held Monsanto at arm's
6 length. Monsanto being a supplier was pretty
7 open with General Electric about what we knew or
8 thought we knew.

9 (End of reading)

10
11 MR. LACY: Now, going to line 16 with
12 the plaintiffs' offer.

13
14 (Reading from video deposition)

15 Q Were you then able to visit the facilities
16 of other people that purchased PCBs, like
17 Westinghouse and see how they were using them?

18 (End of reading)

19
20 MR. MUSSLEWHITE: I'm sorry. Which
21 line did you start?

22 MR. LACEY: Line 16? Your answer is
23 19.

24
25 (Reading from video deposition)

1 A We visited their facilities. I don't recall
2 ever going through, say, Westinghouse capacitor
3 plants.

4 I do remembering going through the
5 manufacturing facilities for some of the smaller
6 plants.

7 Q And in doing that, did you offer comments or
8 suggestions on how they might revise their
9 operation in order to handle PCBs better?

10 A At time that I went through these plants,
11 that hadn't become an issue. I guess I did
12 express my surprise, amazement in one or two
13 cases.

14 Q What were you surprised and amazed at?

15 A The fact that they were no more careful
16 about cleanliness good housekeeping kinds of
17 things.

18 Q Did you ever wonder why people were so
19 sloppy on that?

20 A I wondered, but I had to understand that it
21 was what they thought was the most economical way
22 of conducting their business.

23 Q Did you comment to anybody at Monsanto when
24 you got back about what you had discovered?

25 A Probably not. I don't remember if I did.

1 Q Did you think that if people had better
2 appreciated the potential problems of poor
3 handling, they might have done better?

4 A I'm sure they would have, if they had at the
5 time had that understanding; but I don't think
6 anybody had that knowledge at this time, that I'm
7 talking about.

8 (End of reading)

9
10 MR. LACEY: Page 211, line 18,
11 continuing with the plaintiffs' offer.

12
13 (Reading from video deposition)

14 Q By the way, in these plants where you were
15 amazed, did you specifically point out to the
16 people there the problems with their handling and
17 what they should do for proper handling?

18 A Well, I'm sure I express my surprise at
19 their handling procedures, but I couldn't do more
20 than that.

21 Q Did you take the time to explain to them the
22 problems with their handling and --

23 A At that time?

24 Q -- how they could improve it?

25 A At that time I had no realization that this

1 was a serious problem. This is before the
2 materials had been discovered in environment
3 before I had any realization that there was very
4 serious problems.

5 Q Well, the answer, then, is you didn't stop
6 and explain to them in detail how they should
7 handle it?

8 A No.

9 Q Did you write any letters after you came
10 back --

11 A No.

12 Q -- commenting on their poor housekeeping and
13 saying they ought to do better?

14 A After all, that's their business. Not mine.
15 (End of reading)

16
17 MR. LACEY: Going to Page 213, line 20,
18 continuing with the plaintiffs' offer.

19
20 (Reading from video deposition)

21 Q So, you didn't bother to really make much of
22 a point out of it, then?

23 A No.

24 (End of reading)
25

1 MR. LACEY: Your Honor, that completes
2 the offers from the deposition of Dr. Munch.

3 THE COURT: All right. Ladies and
4 gentlemen of the jury, we are going stand in
5 recess for the day.

6 I will give you this information so
7 that it might help you plan your affairs for
8 tomorrow and also for counsel over the
9 weekend.

10 We will recess at 12:00 o'clock
11 tomorrow. We will not work tomorrow
12 afternoon, and we will recess until the
13 following Monday. So, you may make your
14 plans accordingly and counsel may also be
15 guided by this information.

16 We will stand adjourned until tomorrow
17 morning at 9:00 o'clock.

18 Please return to your places at 9:00
19 o'clock tomorrow morning.

20
21
22 (WHEREUPON AT 5:10 P.M. COURT WAS IN RECESS UNTIL
23 AUGUST 28, 1987, AT 9:00 A.M., AT WHICH TIME THE
24 FOLLOWING PROCEEDINGS WERE HAD AND DONE.)
25